HARRY GRISER

L & W INDUSTRIES

"THE EXPERIENCED ALTERNATIVE"

RAILROAD
CROSSING

COMPLETE LINE OF QUALITY SIGNAL PRODUCTS
CIRCUIT DESIGN • FACTORY WIRING • MATERIALS PACKAGING

L&W Industries, Inc.
3149 E. Chestnut Expressway
Springfield, Missouri 65809
email: sales@lwind.com • website: lwind.com

1-800-852-5587
1-417-864-5411
1-417-864-4473 (fax)

QUICK SHIP PROGRAM

24-48 HOUR SHIPMENTS

L&W has committed to maintaining in stock certain items used in the daily maintenance and installation of your signal system.

If required, these products can be shipped within 24 or 48 hours from receipt of the order.

HOW TO ORDER OR RECEIVE QUOTATION

CALL OUR SALES OFFICE	• 1-800-852-5587 • 1-417-864-5411
FAX	• 1-417-864-4473
E-MAIL	• SALES@LWIND.COM
MAIL	• 3149 E CHESTNUT EXP. SPRINGFIELD, MO 65802

L&W ACCEPTS VISA AND MASTERCARD ORDERS

L & W INDUSTRIES

INTRODUCTION
TERMS & CONDITIONS

COMPANY BACKGROUND

L&W Industries has been manufacturing signal products for over 30 years, offering our railroad customers a full line of quality signal products & services.

All products are manufactured at our centrally located 50,000 square foot facility in Springfield, Missouri.

QUALITY ASSURANCE

L&W Industries has a full Quality Assurance program in place and is NAPM M-1003 Approved.

DELIVERY & SHIPPING

Delivery, shipment and installation dates are estimated dates only, and unless otherwise specified are figured from the day of receipt of order or date of receipt of technical information or approved drawings. The latest date applies.

L&W shall not be held liable for delays of carriers, delays for labor stoppage, difficulties, shortages, or strikes, nor shall L&W be held liable for fires, accidents, failure or delay in obtaining materials, acts of government, weather, or any causes beyond our control.

Unless otherwise specified in writing, materials will be packaged as L&W deems proper for protection against normal handling. There will be a charge for any special requests for additional packaging or handling.

Routing will be at our discretion unless otherwise specified by customer in writing.

All shipments are FOB our plant, delivery of goods to the initial carrier will constitute delivery to you and all goods will be shipped at your risk. A claim for loss or damage in transit must be entered with the carrier and prosecuted by you.

WARRANTY

All L&W Industries manufactured products have a warranty against materials defects and workmanship for a period of one year from date of shipment from L&W. L&W Industries entire warranty obligation is limited to either repair or replacement of any equipment which is returned within the warranty period and which L&W Industries finds defective.

For equipment not manufactured by L&W Industries, the warranties of the manufacturers of such equipment will apply. The warranties are assigned to the purchaser without recourse to L&W Industries.

Return of equipment to L&W Industries is at the buyers risk and expense. Equipment can not be returned without approval of L&W Industries and issue of a Materials Return Authorization form.

Alteration or removal of serial number or identification numbers or markings voids the warranty.

Warranty will not apply to products or components which have been subject to abuse, alteration, improper handling or installation, or which have not been operated in accordance to any instructions issued by L&W Industries.

ORDER CANCELLATION & RESTOCKING

Purchase orders cancelled before shipment may be accepted at L&W's discretion at no cost to the buyer if the material is standard stock item, equipment has not been modified, or the cancellation is not of such magnitude as to bring additional cost to L&W. If these conditions do not prevail, a restocking charge will be implemented.

A restocking charge of 15% of the total sell price will apply on material returned to L&W for credit and/or exchange. The following must apply. Material is standard L&W stock. L&W evaluates the material as still being in new condition. The return is approved by L&W. L&W reserves the right to refuse returns if it creates an overstock situation at L&W. Material returned for restocking will be at buyers expense.

A Materials Return Authorization must be issued by L&W prior to return of materials.

L & W INDUSTRIES

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L & W INDUSTRIES

CIRCUIT DESIGN

L&W Industries Engineering Group has provided Circuit Design Services to Class One Railroads, Regional, Transits and Short Lines for 30 years.

Projects include Highway Crossings, CTC Systems, Electrocode, Local Control Interlockings, APB Signal Systems, Remote Controlled Interlockings, Automatic Interlocking Repair and FRA Testing, and Radio Controlled Switches.

In addition, L&W offers drafting and circuit revision services. All work is done on AutoCad.

FACTORY WIRING

L & W's experienced wiremen can Factory Wire your instrument enclosures to your specifications with the equipment you specify.

Our crews have wired instrument enclosures for 25 years for Highway Crossing Projects, Hot Box Detectors, End of Sidings and Intermediate Signal Locations.

L&W has wired over 1,000 Instrument Enclosures for AEI locations.

MATERIALS PROJECT PACKAGING & WAREHOUSING

In addition to Circuit Design and Factory Wiring, L&W can take your project one step further by Sourcing, Procuring, Warehousing and Packaging your project materials for direct shipment to the project location on an L&W Truck or Container.

REBUILDING SERVICES

L & W offers complete rebuilding services for switch machines, controllers and switch locks. Also, shelf and plug in relays.

All products are rebuilt to the original specifications by experienced personnel.

A A A A A A A

WAYSIDE SIGNALS

REAR REMOVABLE COLORLIGHTS

VERTICAL STACKED COLORLIGHTS

TRIANGULAR COLORLIGHTS

DWARF SIGNALS

MASTS, PLATFORMS,LADDERS & BASES

SIGNAL HOUSE-TOP MOUNTED SIGNALS

DOUBLET LENS ASSEMBLIES

HOODS & BACKGROUNDS

SNOW SHIELDS

BULB BRACKET ASSEMBLIES

PHANKILL ASSEMBLIES

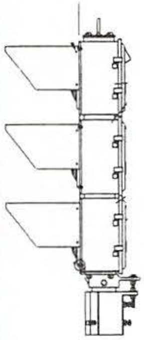
SIGNAL MOUNTING BRACKETS

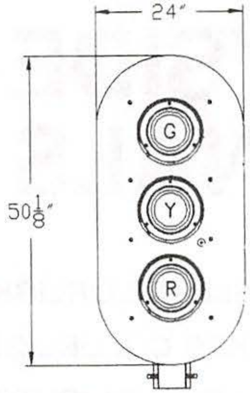
SIGNS NUMERALS & LETTERS

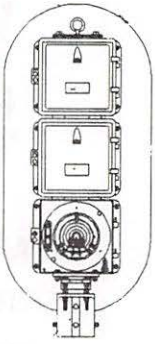
SLOT COVER PLATES

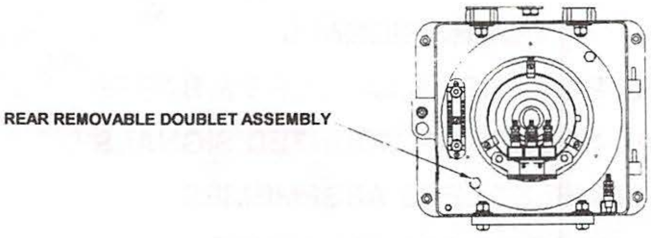
L & W INDUSTRIES

COLORLIGHT SIGNAL HEADS WITH REAR REMOVABLE DOUBLET VERTICAL (STACKED)









L&W COLORLIGHTS ARE SHIPPED WITH THE FOLLOWING STANDARD FEATURES

Light Weight Cast Aluminum Construction
Rear Removable Doublet Assembly
Factory Focused
10V 18W Precision Bulb
5-1/2" Diameter Glass Inner Doublet Lens
8-3/8" Diameter Acrylic Outer Lens 40 Degree Deflection 4" Focus
Powder Coated Black Hoods & Backgrounds
5" Adjustable Mast Mounting Teeter Base
Padlockable Doors
Alignment Peep Site
Lifting Eye

ALL L&W COLORLIGHTS ARE SHIPPED COMPLETELY ASSEMBLED READY FOR INSTALLATION!!!

SEE FOLLOWING PAGE FOR ORDERING REFERENCES & OPTIONAL FEATURES

L & W INDUSTRIES

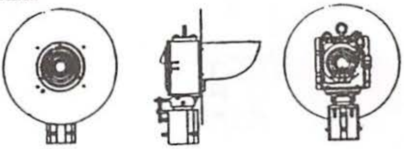
COLORLIGHT SIGNAL HEADS WITH REAR REMOVABLE DOUBLET VERTICAL (STACKED)

ORDERING REFERENCES

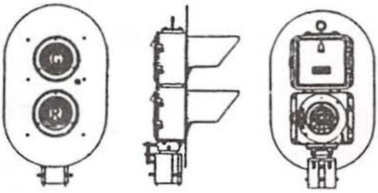
STANDARD FEATURES LISTED ON PREVIOUS PAGE
TO ORDER SPECIFY LW PART NO. & ASPECT DESIRED AT ##
G=GREEN Y=YELLOW R=RED L=LUNAR
SPECIFY OPTIONS DESIRED

INCANDESCENT OR LED

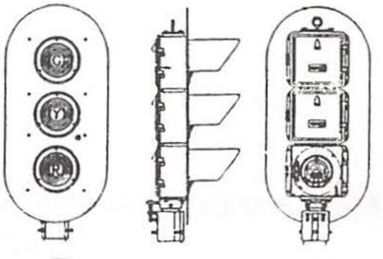
ONE POSITION COLORLIGHT SIGNAL
LW PART NO. 5D8100-#
LW PART NO. 5D9001-# (LED)



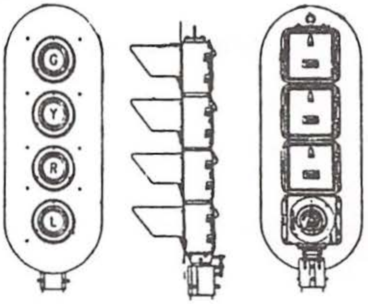
TWO POSITION COLORLIGHT SIGNAL
LW PART NO. 5D8200-##
LW PART NO. 5D9002-## (LED)



THREE POSITION COLORLIGHT SIGNAL
LW PART NO. 5D8300-###
LW PART NO. 5D9003-### (LED)



FOUR POSITION COLORLIGHT SIGNAL
LW PART NO. 5D8400-####
LW PART NO. 5D9004-#### (LED)

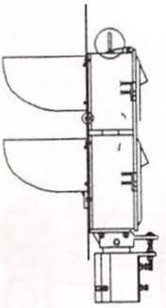


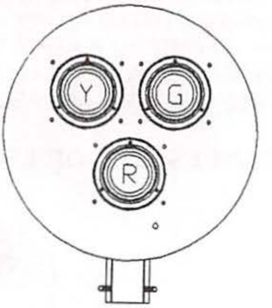
OPTIONS

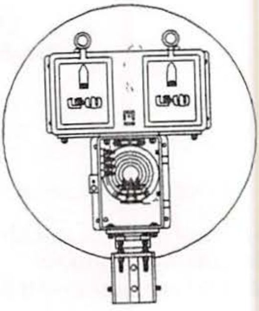
10V25W Bulb
Dual Filament Bulbs
Snowshields
Honeycomb Phankills
Transformers
Adjustable Resistors
Special Lenses (See section K for additional lenses)
Door Locking Bars

L & W INDUSTRIES

COLORLIGHT SIGNAL HEADS
FRONT REMOVABLE DOUBLETS
TRIANGULAR (V SIGNALS)







L&W COLORLIGHTS ARE SHIPPED WITH THE FOLLOWING STANDARD FEATURES

Light Weight Cast Aluminum Construction
Front Removable Doublet Assembly
Factory Focused
10V 18W Precision Bulb
5-1/2" Diameter Glass Inner Doublet Lens
8-3/8" Diameter Acrylic Outer Lens 40 Degree Deflection 4" Focus
Galvaneeled Steel Powder Coated Black Hoods & Backgrounds
5" Adjustable Mast Mounting Teeter Base
Padlockable Doors
Alignment Peep Site
Lifting Eye

ALL L&W COLORLIGHTS ARE SHIPPED COMPLETELY ASSEMBLED READY FOR INSTALLATION!!!

SEE FOLLOWING PAGE FOR ORDERING REFERENCES & OPTIONAL FEATURES

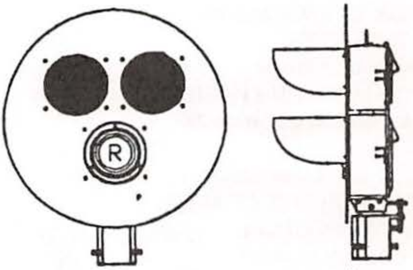
L & W INDUSTRIES

COLORLIGHT SIGNAL HEADS
FRONT REMOVABLE DOUBLETS
TRIANGULAR (V SIGNALS)

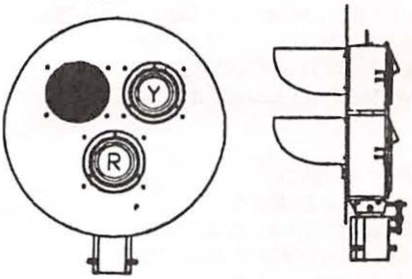
ORDERING REFERENCES

STANDARD FEATURES LISTED ON PREVIOUS PAGE
TO ORDER SPECIFY LW PART NO. & ASPECT DESIRED AT ##
G=GREEN Y=YELLOW R=RED L=LUNAR
SPECIFY OPTIONS DESIRED

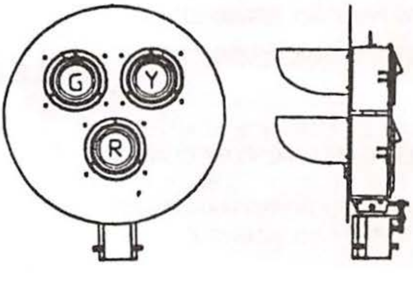
ONE POSITION COLORLIGHT SIGNAL
LW PART NO. 5D4541-#



TWO POSITION COLORLIGHT SIGNAL
LW PART NO. 5D4542-##



THREE POSITION COLORLIGHT SIGNAL
LW PART NO. 5D4543-###



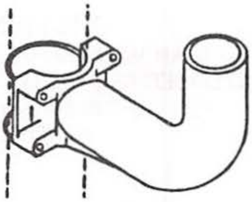
OPTIONS

- 10V25W Bulb
- Dual Filament Bulbs
- Honeycomb Phankills
- Transformers
- Adjustable Resistors
- Special Lenses (See section K for additional lenses)

L & W INDUSTRIES

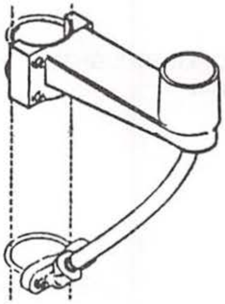
COLORLIGHT SIGNAL MOUNTING BRACKETS

FRONT OR SIDE OF MAST
1 WAY DIRECTION
5" TUBE TYPE
CAST ALUMINUM
WITH MOUNTING HARDWARE
LW PART NO. 5Z4609-X



BACK TO BACK MOUNT
5" TUBE TYPE
CAST ALUMINUM
WITH MOUNTING HARDWARE
LW PART NO. 5Z4609-2X

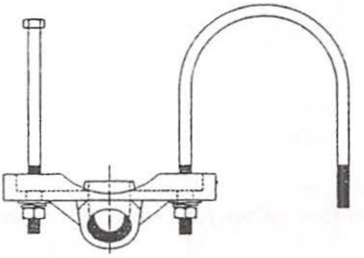
FRONT OR SIDE OF MAST
1 WAY DIRECTION
5" CAST ALUMINUM
WITH EXTERNAL CONDUIT (5FT LONG)
CABLE ENTRANCE ADAPTOR
MOUNTING HARDWARE
LW PART NO. 5Z4600-X



BACK TO BACK
5" CAST ALUMINUM
WITH EXTERNAL CONDUIT &
CABLE ENTRANCE ADAPTOR
MOUNTING HARDWARE
LW PART NO. 5Z4600-2X

CABLE ENTRANCE ADAPTORS

CABLE ENTRANCE ADAPTOR
FOR EXTERNAL FLEX CONDUIT
1 WAY OR BACK TO BACK
WITH MOUNTING HARDWARE
LW PART NO. 5Z4603-X



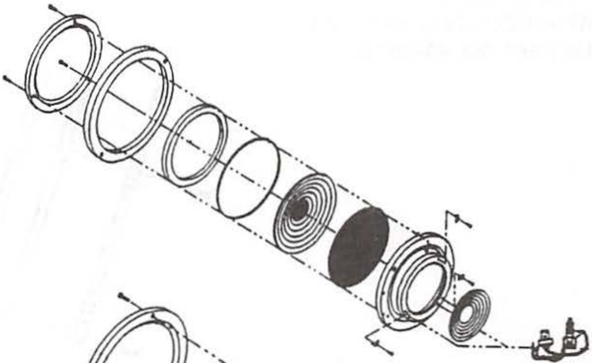
L & W INDUSTRIES

8-3/8" & 6-3/8" DOUBLET LENS ASSEMBLIES REPLACEMENTS FOR LW5D8000 LW5D4500 COLORLIGHTS & 5B4600 DWARF

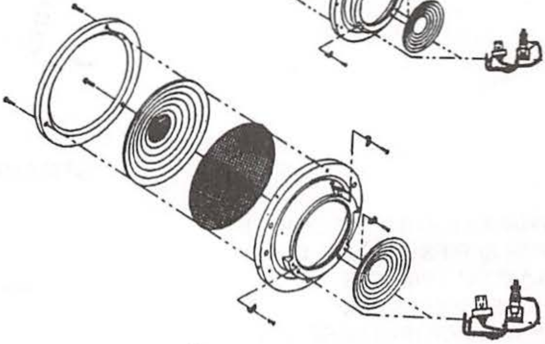
COMPLETE DOUBLET ASSEMBLY PREFOCUSED READY FOR FIELD INSTALLATION

# INDICATE COLOR OF ASPECT DESIRED
G=GREEN Y=YELLOW R=RED L=LUNAR

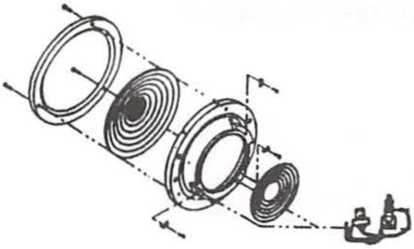
SERIES 5D8000 REAR REMOVABLE
DOUBLET ASSEMBLY
FACTORY FOCUSED
LW PART NO. 5Z4535-5X#



SERIES 5D4500 FRONT REMOVABLE
SERIES 5D4540 TRIANGULAR
SERIES 5B4640 8" DIA DWARF
DOUBLET ASSEMBLY
FACTORY FOCUSED
LW PART NO. 5Z4535-X#

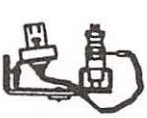


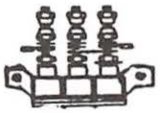
SERIES 5D4630 FRONT REMOVABLE
6-3/8" DIA DWARF
DOUBLET ASSEMBLY
FACTORY FOCUSED
LW PART NO. 5Z4630-8X#



REPLACEMENT BULB BRACKET ASSEMBLY

BULB BRACKET ASSEMBLY
FOR SERIES 5D8000, 5D4500
& 5D4540 CLS
& 6B4640 8-3/8" DIA DWARF
LW PART NO. 5Z4669-1X

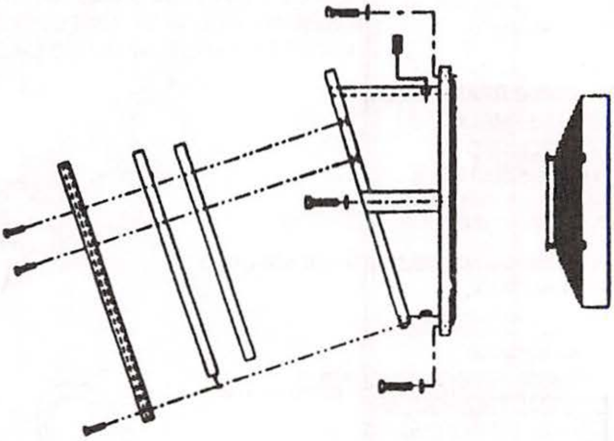




PHANKILL ASSEMBLIES
FOR LW8000 LW4500

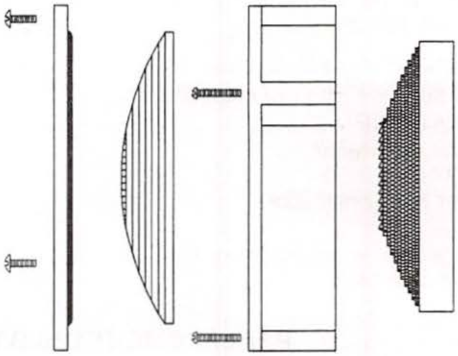
SLANTED

PHANKILL SLANTED COMPLETE
FOR SERIES LW8000 & LW4500
8-3/8" DIAMETER LENS CLS
HONEYCOMB STYLE
WITH MOUNTING HARDWARE
LW PART NO. 5S4803-X



STRAIGHT

PHANKILL STRAIGHT COMPLETE
FOR SERIES LW8000 & LW4500
8-3/8" DIA LENS CLS
HONEYCOMB STYLE
WITH MOUNTING HARDWARE
LW PART NO. 5S4800-X



L & W INDUSTRIES

SNOWSHIELD ASSEMBLIES FOR LW8000 & LW4500 SERIES CLS

SERIES 8000 REAR REMOVABLE CLS

ONE POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4731-X

ONE POSITION SNOWSHIELD KIT ONLY
LW PART NO. 5Z4722-2X

TWO POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4732-X

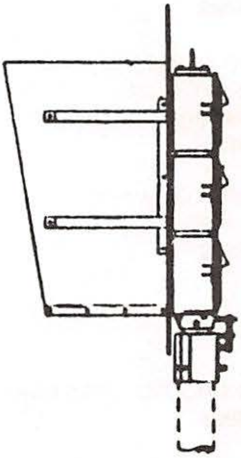
TWO POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4721-2X

THREE POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4733-X

THREE POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4720-2X

FOUR POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4734-X

FOUR POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4734-2X



SERIES 4500A FRONT REMOVABLE CLS

ONE POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4722-X

ONE POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4722-X1

TWO POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4721-X

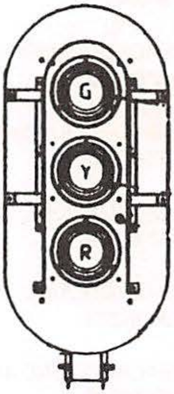
TWO POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4721-X1

THREE POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4720-X

THREE POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4720-X1

FOUR POSITION SNOWSHIELD WITH BACKGROUND
LW PART NO. 5Z4734-X

FOUR POSITION SNOWSHIELD ONLY
LW PART NO. 5Z4734-1X



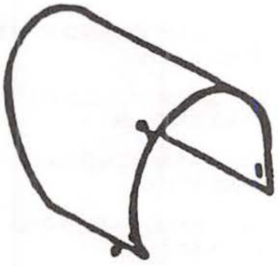
L & W INDUSTRIES

MISC REPLACEMENT PARTS FOR SERIES 5B8000 & 5B4500 & 5B4600 CLS HOODS & BACKGROUNDS

HOOD FOR LW8000 CLS
5Z8549S

HOOD FOR LW4500 CLS
LW4540 TRI CLS
& LW4640 8" DIA DWARF
5Z4695S

HOOD FOR LW4600
6" DWARF
5Z4635S



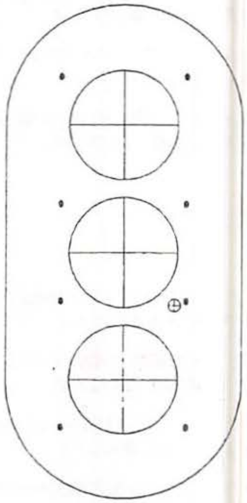
BACKGROUNDS

BACKGROUND 1 POS FOR LW8000 CLS
5Z8500S

BACKGROUND 2POS FOR LW8000 CLS
5Z8550S

BACKGROUND 3POS FOR LW8000 CLS
5Z8600S

BACKGROUND 4POS FOR LW8000 CLS
5Z8650S



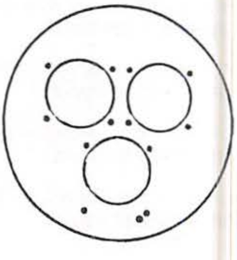
BACKGROUND 1POS FOR LW4500 CLS
5Z4525S

BACKGROUND 2POS FOR LW4500 CLS
5Z4526S

BACKGROUND 3POS FOR LW4500 CLS
5Z4527S

BACKGROUND 4POS FOR LW4500 CLS
5Z4528S

BACKGROUND 3POS FOR LW4500 TRIANGULAR CLS
5Z4540S

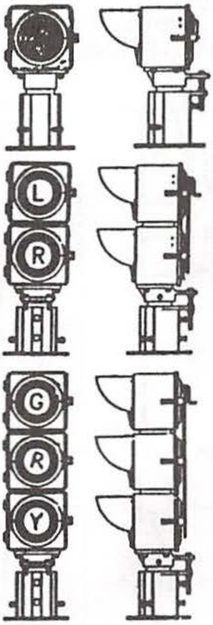


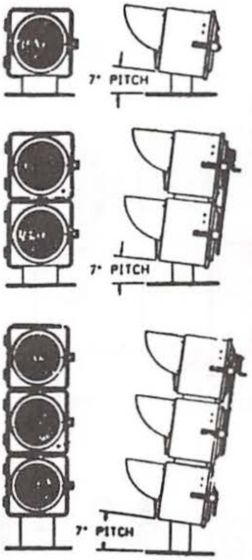
L & W INDUSTRIES

DWARF SIGNALS STACKABLE
6-3/8" & 8-3/8" DIAMETER LENSES

L&W DWARF SIGNALS ARE AVAILABLE WITH AN 8-3/8" OR 6-3/8" DIAMETER OUTER LENSE AND CAN BE SHIPPED WITH EITHER AN ADJUSTABLE 5" MOUNTING BASE OR A 7 DEGREE FIXED MOUNTING BASE.

GENERAL FEATURES & OPTIONS ARE THE SAME AS DETAILED IN OUR VERTICAL COLORLIGHT SPECIFICATIONS.





ORDERING REFERENCES

5" ADJUSTABLE TEETER MOUNT BASE

ONE POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4631A-#
ONE POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4641A-#

TWO POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4632A-#
TWO POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4642A-#

THREE POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4633A-#
THREE POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4643A-#

FOUR POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4634-#
FOUR POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4644A-#

FIXED RIGID 7 DEGREE TILT BASE

ONE POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4631F-#
ONE POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4641F-#

TWO POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4632F-#
TWO POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4642F-#

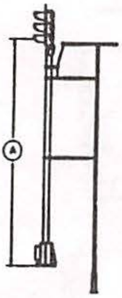
THREE POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4633F-#
THREE POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4643F-#

FOUR POSITION DWARF SIGNAL 6-3/8" DIA
LW PART NO. 5B4634F-#
FOUR POSITION DWARF SIGNAL 8-3/8" DIA
LW PART NO. 5B4644F-#

COLORLIGHT WAYSIDE SIGNAL ASSEMBLIES
SERIES 5A4610 COMPLETE
WITH CLS HEAD MAST LADDER & PLATFORMS

L&W 5A4610 Series Wayside Colorlight Signal Assemblies are shipped with following standard features.

5" SCH 80 Aluminum Mast with Cast Aluminum Pinnacle
Cast Aluminum Junction Box Base with all AAR Hardware
Cast Aluminum Signal Mounting Brackets
Galvanized Steel Platforms, Ladders & Ladder Bases
LW Series 5D8000 Rear Removable Colorlight Signals



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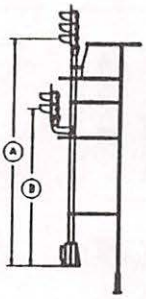

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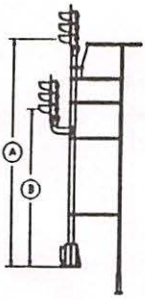

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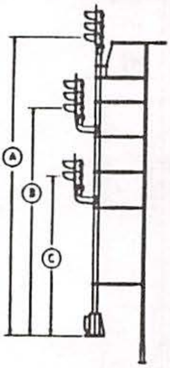

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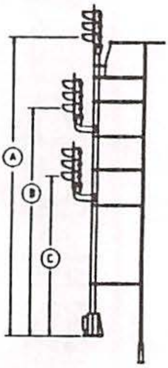

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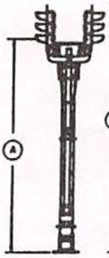

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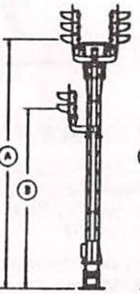

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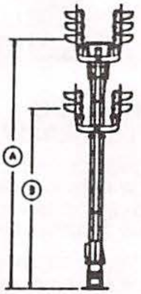

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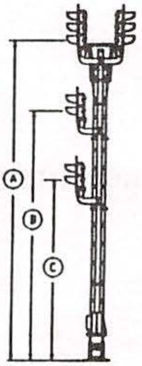

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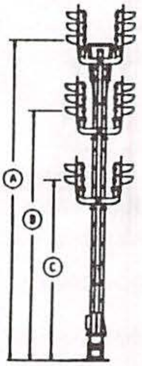

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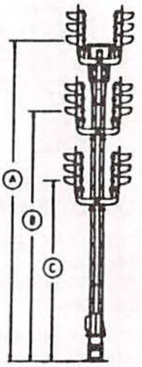


REF. K

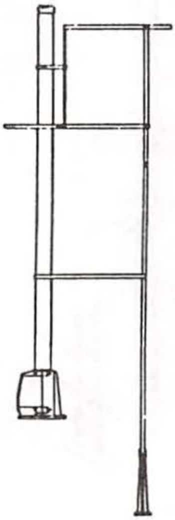
ORDERING REFERENCES

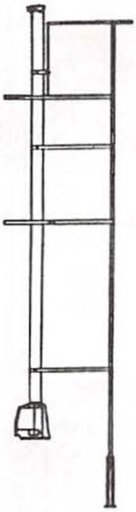
SPECIFY SIGNALS DESIRED
(i.e. 3POSITION OVER 2 POSITION AND ASPECT COLORS & REF LETTER)
ANY COLORIGHT OPTIONS DESIRED (See Page 7)
HEIGHT OF SIGNALS-DIMENSION A, B & C as required
(Measured from bottom of base to center of bottom aspect)
Please contact our Sales Office at 1-800-852-5587 for any special requirements.

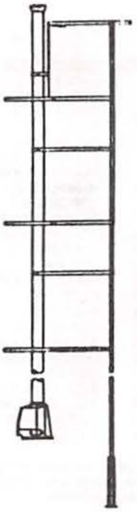
SERIES 5G7400
REPLACEMENT MAST LADDER JB BASE PLATFORMS FOR 5A4610 SERIES COLORLIGHT ASSEMBLIES

L&W 5G7400 Series Wayside Colorlight Signal Replacement Masts Ladders JB Base Platforms are shipped with following standard features.

5" Diameter SCH 80 Aluminum Mast
Cast Aluminum Pinnacle
Cast Aluminum Junction Box Base with all AAR Hardware
Cast Aluminum Signal Mounting Brackets
Galvanized Steel Platforms, Ladders & Ladder Bases







ORDERING REFERENCES

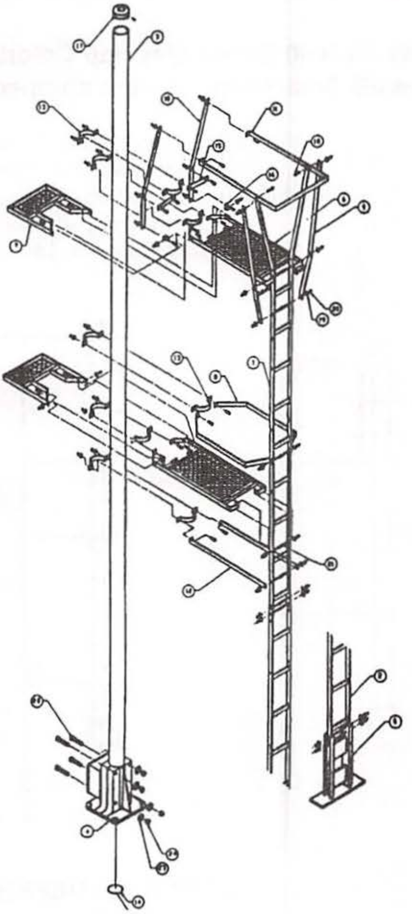
SPECIFY FOR WHAT TYPE SIGNALS DESIRED
5G7401 (ONE PLATFORM UNIT FOR 1 LIGHT)
5G7402 (TWO PLATFORM UNIT FOR TWO LIGHTS)
5G7403 (THREE PLATFORM UNIT FOR THREE LIGHTS)

HEIGHT OF SIGNALS-DIMENSION A, B & C as required
(Measured from bottom of base to center of bottom aspect)

Please contact our Sales Office at 1-800-852-5587 for any special requirements.

L & W INDUSTRIES

TYPICAL ASSEMBLY DRAWING
FOR SERIES LW5G7400
REPLACEMENT MAST LADDER JB BASE PLATFORMS



ITEM	DESCRIPTION	PART NO.
1	LADDER	5J7481-58
2	LADDER EXTENSION	*
3	MAST	*
4	BASE	*
5	FOUNDATION	8A7410-X
6	PLATFORM, REAR	7J7465-X
7	PLATFORM, FRONT	7J7470-X
8	HANDRAIL	7J7495
9	TOP BRACE	7J7480
10	HANDRAIL SUPPORT	7J7482
11	TOP HANDRAIL	7J7490
12	STAY SIDE	7J7455
13	5" CLAMP	7J7475
14	RODENT PLATE	5L5555
15	STIFFENER	7J7483
16	BOLT CLIP	7J7472
17	PINNACLE, 5"	5L7500-X
18	BOLT 1/2-13 X 2"	REF. A
19	LOCKWASHER 1/2"	REF. B
20	NUT 1/2-13	REF. C
21	BOLT 1/2-13 X 1 1/2"	REF. D
22	BOLT 1-8 X 7 1/2"	REF. E
23	FLATWASHER 1"	REF. F
24	NUT 1-8	REF. G

* These item noted with an asterisk can be located in detail in other areas of this publication

ORDERING REFERENCES

SPECIFY FOR WHAT TYPE SIGNALS DESIRED
5G7401 (ONE PLATFORM UNIT FOR 1 LIGHT)
5G7402 (TWO PLATFORM UNIT FOR TWO LIGHTS)
5G7403 (THREE PLATFORM UNIT FOR THREE LIGHTS)

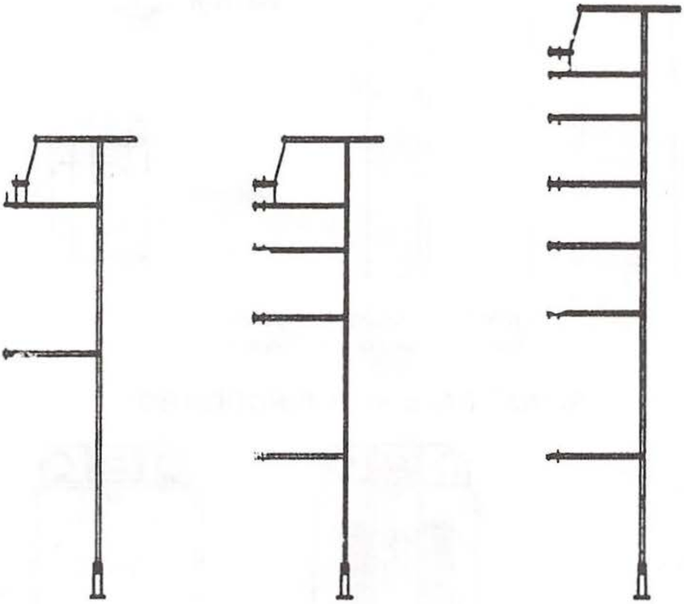
HEIGHT OF SIGNALS-DIMENSION A, B & C as required
(Measured from bottom of base to center of bottom aspect)

Please contact our Sales Office at 1-800-852-5587 for any special requirements.

SERIES 5J7460
REPLACEMENT LADDER & PLATFORMS FOR SERIES 5A4610 COLORLIGHT ASSEMBLIES

L&W 5J7460 Series Wayside Colorlight Signal Replacement Ladders Bases & Platforms are shipped with following standard features.

Galvanized Steel Platforms, Ladders & Ladder Base
All Yellow Zinc Hardware



ORDERING REFERENCES

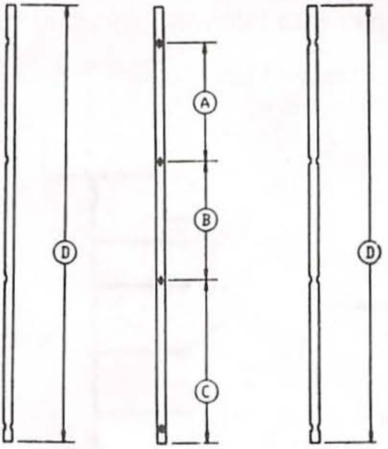
SPECIFY FOR WHAT TYPE SIGNALS DESIRED
5J7461 (ONE PLATFORM UNIT FOR 1 LIGHT)
5J7462 (TWO PLATFORM UNIT FOR TWO LIGHTS)
5J7603 (THREE PLATFORM UNIT FOR THREE LIGHTS)

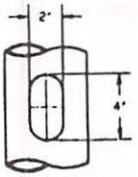
HEIGHT OF SIGNALS-DIMENSION A, B & C as required
(Measured from bottom of base to center of bottom aspect)

Please contact our Sales Office at 1-800-852-5587 for any special requirements.

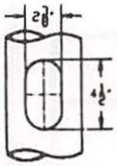
REPLACEMENT MASTS, JB BASE & PINNACLE FOR SERIES 5A4610 & 5G7400 COLORLIGHT SIGNAL ASSEMBLIES

MASTS SCH80 5" DIAMETER





MAST SLOT

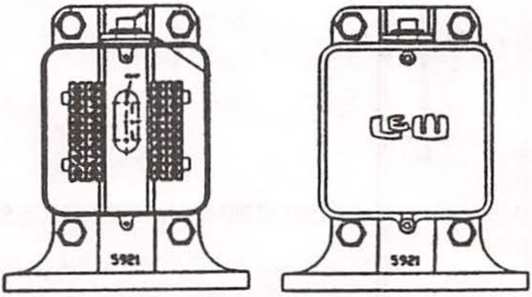


BASE SLOT

MAST ORDERING REFERENCES
Specify Dimensions as shown above

SIGNAL BASE WITH JUNCTION BOX

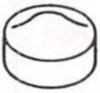
JUNCTION BOX BASE
FOR 5" MAST
11-11/16" BOLT SPACING
24 AAR TERMINALS &
AAR HARDWARE
LW PART NO. 7D5920-X



FOR ADDITIONAL SIGNAL BASES SEE CATALOG SECTION F

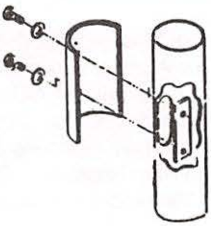
PINNACLE

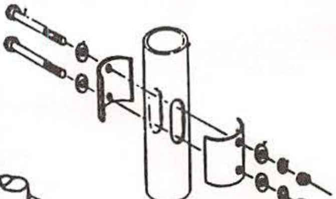
PINNACLE CAST ALUMINUM
FOR 5" OR 4" MAST
LW PART NO. 5Z7500-X

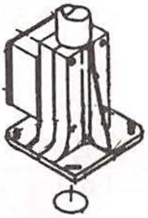


REPLACEMENT COMPONENTS & ACCESSORIES FOR SERIES 5A4610, 5G7400 & 5J7460 COLORLIGHT SIGNAL ASSEMBLIES

COVER PLATES





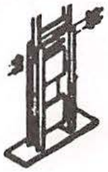


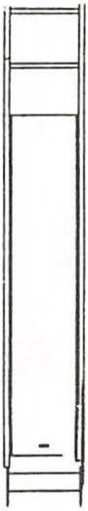
COVER PLATE
FOR 1 WAY
2"X4" MAST SLOT
WITH HARDWARE
LW PART NO. 5Z7428-2X

COVER PLATE
FOR 2 WAY (BACK TO BACK)
2"X 4" MAST SLOTS
WITH HARDWARE
LW PART NO. 5Z7428-1X

RODENT PLATE
FOR 5" MAST
LW PART NO. 5Z5554

LADDERS & LADDER BASE

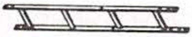




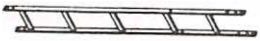
LADDER BASE
GALV STEEL
LW PART NO. 5J7410-X

LADDER GUARD
10FT HIGH
FOR STANDARD 8" WIDE LADDER
LW PART NO. 5J7407-1X (FOR ONE SIDE OF LADDER)
LW PART NO 5J7407-2X (FOR BOTH SIDES OF LADDER)

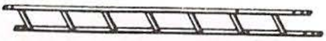
LADDER SECTION 5FT
GALV STEEL
NO HARDWARE
LW PART NO. 5J7510-5X



LADDER SECTION 7FT
GALV STEEL
NO HARDWARE
LW PART NO. 5J7510-7X



LADDER SECTION 9 FT
GALV STEEL
NO HARDWARE
LW PART NO. 5J7510-9X



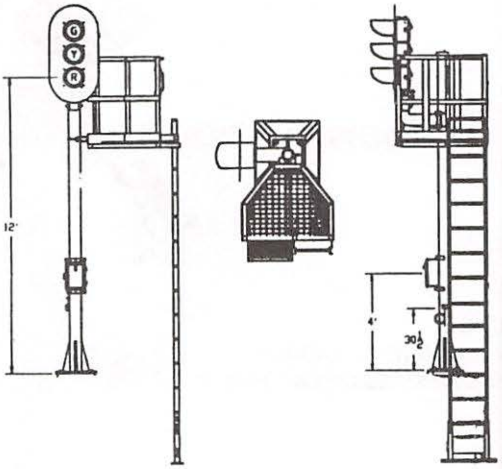
For Additional Ladder Parts, please contact our Sale Office at 1-800-852-5587

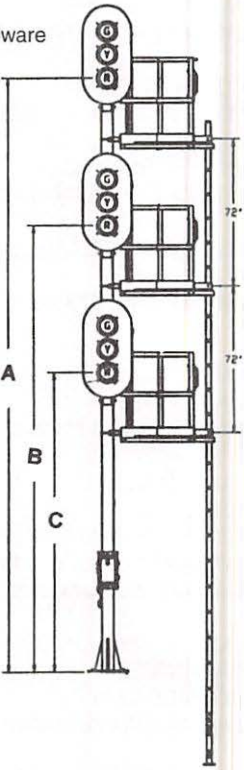
L & W INDUSTRIES

COLORLIGHT WAYSIDE SIGNAL ASSEMBLIES SERIES 5A4620 COMPLETE WITH SAFETY PLATFORMS & LADDERS

L&W 5A4620 Series Wayside Colorlight Signal Assemblies are shipped with following standard features.

5" SCH 80 Aluminum Mast with Fabricated Flange Base
Cast Aluminum Pinnacle
Mast Mounted Termination Box with 24 AAR Terminals & Hardware
Cast Aluminum Signal Mounting Brackets
OSHA Style Aluminum Platforms and Ladders
LW Series 5D8000 Rear Removable Colorlight Signals
All Yellow Zinc Hardware





ORDERING REFERENCES

SPECIFY SIGNALS DESIRED
(i.e. 3POSITiON OVER 2 POSITION AND ASPECT COLORS)

ANY COLORIGHT OPTIONS DESIRED
(See Page 7)

HEIGHT OF SIGNALS-DIMENSION A, B & C as required
(Measured from bottom of base to center of bottom aspect)

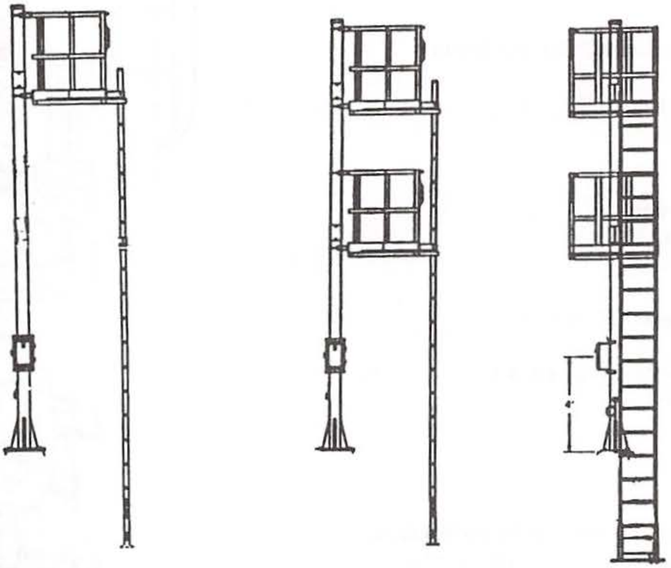
Please contact our Sales Office at 1-800-852-5587 for any special requirements.

L & W INDUSTRIES

SERIES 5G7600
REPLACEMENT MAST LADDER JB BASE PLATFORMS FOR SERIES 5A4620 COLORLIGHT ASSEMBLIES

L&W 5G7600 Series Wayside Colorlight Signal Replacement Masts Ladders Fabricated Base Platforms are shipped with following standard features.

5" Diameter SCH 80 Aluminum Mast with Fabricated Base
Cast Aluminum Pinnacle
Mast Mounted Terminal Box with all AAR Hardware
Cast Aluminum Signal Mounting Brackets
OSHA Style Platforms and Ladders
All Yellow Zinc Hardware



ORDERING REFERENCES

SPECIFY FOR WHAT TYPE SIGNALS DESIRED
5G7601 (ONE PLATFORM UNIT FOR 1 LIGHT)
5G7602 (TWO PLATFORM UNIT FOR TWO LIGHTS)
5G7603 (THREE PLATFORM UNIT FOR THREE LIGHTS)

HEIGHT OF SIGNALS-DIMENSION A, B & C as required
(Measured from bottom of base to center of bottom aspect)

Please contact our Sales Office at 1-800-852-5587 for any special requirements.

L & W INDUSTRIES

SIGNAL HOUSES
FOR TOP MOUNTED WAYSIDE SIGNALS
SINGLE & DOUBLE PLATFORM DESIGN

L&W Signal Houses for Top Mounted Signals are currently available with 1 or 2 platform design. Signals can be mounted back to back or 1 directional and can be Colorlight or Searchlight.

Signal Houses are available in aluminum with all aluminum platform signal mast and ladder assemblies. They are also available with a powder coated steel house with aluminum platform signal mast and ladder assemblies.

Currently the Signal Houses area can be ordered in 3x4ft or 4x6ft design.

SAFETY FEATURES

All Aluminum Construction

36" High Platform Rail made of 2" Square Tubing

Easy Access to Front & Back of Signals

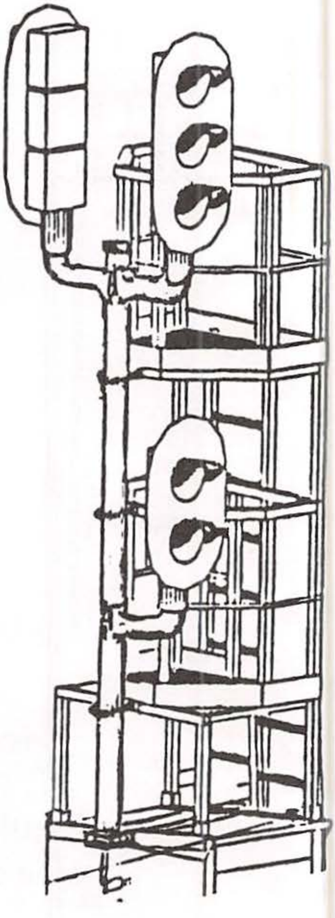
Serrated Platform

4" High Platform Toe Boards

OSHA Style Ladder

Safety Chain around Platform Entrance

Grab Handles for use while climbing in & out of platform.



COST SAVINGS

Reduces amount of materials required for signal locations (Eliminates Signal Cable, Foundation, Signal Mast)

Reduces amount labor required to install a signal location (Less digging of cable and foundation, plus less pre assembly required)

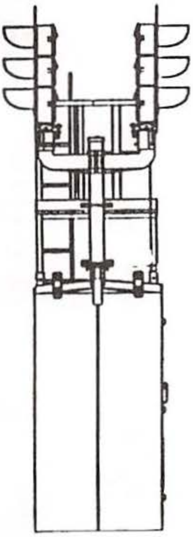
See following pages for ordering references.
For additional information, please contact our sales office at 1-800-852-5587.

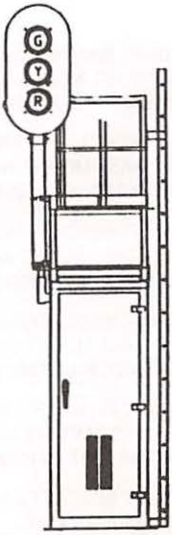
3x4 & 4X6 SIGNAL HOUSES FOR TOP MOUNTED WAYSIDE SIGNALS

3X4 SIGNAL HOUSE

3X4 SINGLE PLATFORM
ALUMINUM CONSTRUCTION
2EA 3 POSITION CLS
BACK TO BACK
LW PART NO. 1A30404A

3X4 DOUBLE PLATFORM
ALUMINUM CONSTRUCTION
2EA 3 POSITION CLS
BACK TO BACK
WITH 1EA 2 POSITION UNDER
LW PART NO. 1A30406A

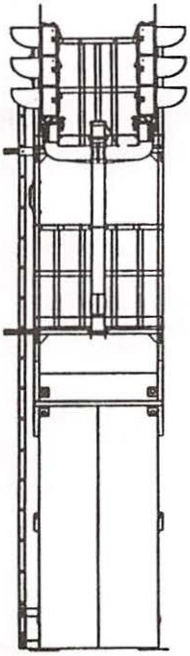


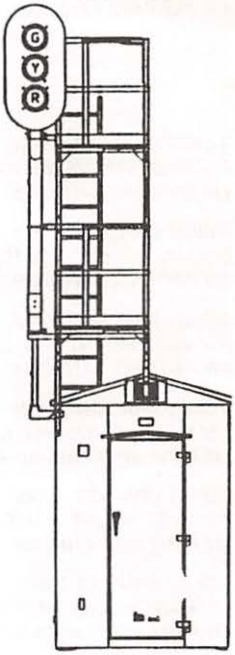


4X6 SIGNAL HOUSES

4X6 SINGLE PLATFORM
ALUMINUM CONSTRUCTION
2EA 3 POSITION CLS
BACK TO BACK
LW PART NO. 1A40604A

4X6 DOUBLE PLATFORM
ALUMINUM CONSTRUCTION
2EA 3 POSITION CLS
BACK TO BACK
WITH 1EA 2 POSITION UNDER
LW PART NO. 1A40606A





For detailed specifications and other signal configurations, please contact your Sales Office at 1-800-852-5587

L & W INDUSTRIES

WAYSIDE SIGNAL NUMBER PLATE MOUNTING BRACKETS

VERTICAL

3 DIGIT BRACKET 1WAY
F/ 5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1092-35

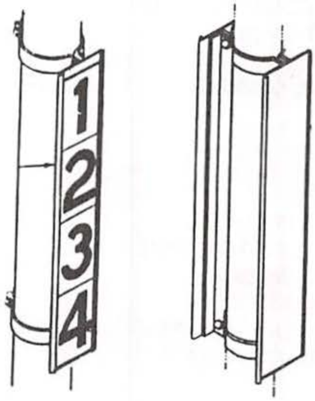
3 DIGIT BRACKET 2WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1092BB-35

4 DIGIT BRACKET 1WAY
F/ 5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1092-45

4 DIGIT BRACKET 2 WAY
F/5" MAST MOUNT W/MTGHDW
LW PART NO. 7A1092BB-45

5 DIGIT BRACKET 1 WAY
F/5" MAST MOUNT
LW PART NO. 7A1092-55

5 DIGIT BRACKET 2 WAY
F/5" MAST MOUNT
LW PART NO. 7A1092BB-55



HORIZONTAL

3 DIGIT BRACKET 1 WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1097-35

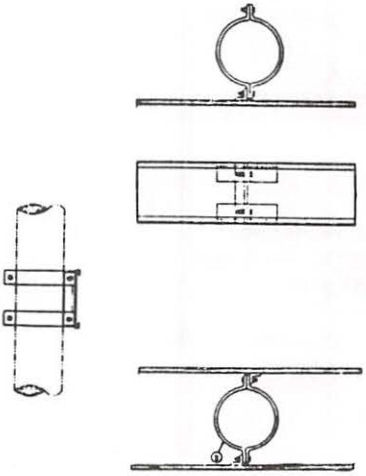
3 DIGIT BRACKET 2 WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1097BB-35

4 DIGIT BRACKET 1 WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1097-45

4 DIGIT BRACKET 2 WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1097BB-45

5 DIGIT BRACKET 1 WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1097-55

5 DIGIT BRACKET 2 WAY
F/5" MAST MOUNT W/MTG HDW
LW PART NO. 7A1097BB-55

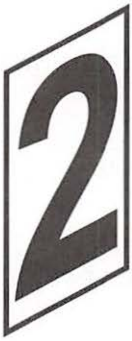


SEE NEXT PAGE FOR DIGIT ORDERING INFORMATION

WAYSIDE & DWARF SIGNAL DIGITS
CTC & DISTANCE SIGNS

DIGITS

BLACK DIGIT ON WHITE REFLECTIVE TAPE
DIGIT 6"H X 4"W
ON 5-12/"W X 8"H ALUM PLATE
LW PART NO. 7A1094-#
#=NUMBER DESIRED

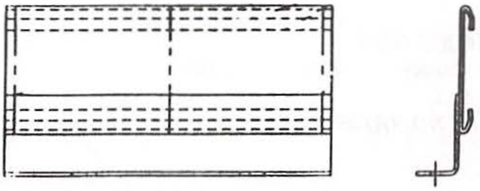


WHITE DIGIT ON BLACK PAINT
DIGIT 6"H X 4"W
ON 5-1/2" W X 8"H ALUM PLATE
LW PART NO. 7A1096-#
#=NUMBER DESIRED

BLACK DIGIT ON WHITE REFLECTIVE TAPE
DIGIT 2-1/32"H X 1-3/8"W
ON 2-27/32"H X 1-15/16"W ALUM PLATE
F/DWARF SIGNAL
LW PART NO. 7A1095-#
#=NUMBER DESIRED

MOUNTING BRACKET FOR 7A1095-# DWARF NUMBERS

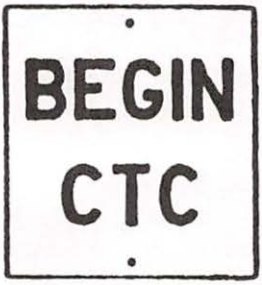
4 DIGIT BKT
1 WAY HORIZONTAL
4" BOLT SPACING
F/TOP DWARF SIGNAL MTG
LW PART NO. 7A1101

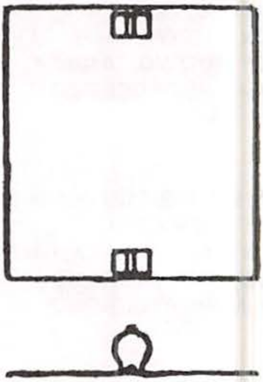


CTC DISTANCE SIGNS

CTC SIGNS

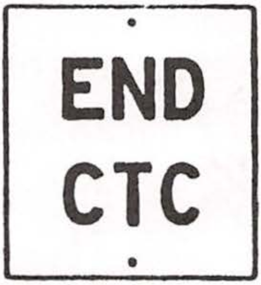
END CTC
BLACK ON WHITE REFLECTIVE TAPE
SIGN ONLY
LW PART NO. 7A1078E





END CTC
BLACK ON WHITE REFLECTIVE TAPE
2" MOUNTING BRACKET
LW PART NO. 7A1078E2
5" MOUNTING BRACKET
LW PART NO. 7A1078E5

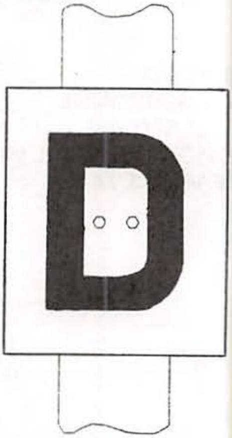
BEGIN CTC
BLACK ON WHITE REFLECTIVE TAPE
SIGN ONLY
LW PART NO. 7A1079E



BEGIN CTC
BLACK ON WHITE REFLECTIVE TAPE
2" MOUNTING BRACKET
LW PART NO. 7A1079E2
5" MOUNTING BRACKET
LW PART NO. 7A1079E5

"D" DISTANCE SIGN

D DISTANCE SIGN
BLACK ON WHITE REFLECTIVE TAPE
SIGN ONLY
LW PART NO. 7A1055E



D DISTANCE SIGN
BLACK ON WHITE REFLECTIVE TAPE
5" MOUNTING HARDWARE
LW PART NO. 7A1055E5

L & W INDUSTRIES

GRADE CROSSINGS

FLASHER ASSEMBLIES

FLASHER/GATE ASSEMBLIES

FLASHING LIGHT HEADS

LENSES & MIRRORS

HOODS & BACKGROUNDS

JUNCTION BOX CROSSARMS

EXTENSIONS & ELBOWS

SIGNS & SIGN MOUNTING HARDWARE

REPLACEMENT MASTS

CROSSING GATEARMS & LAMPS

CONVERSION BRACKETS & BREAKAWAYS

HIGH WIND GUARDS

PEDESTRIAN CROSSING SIGNALS

STUB MAST ASSEMBLIES

L & W INDUSTRIES

TURNKEY HIGHWAY CROSSING INSTALLATIONS

L&W OFFERS

CIRCUIT DESIGN

FACTORY WIRED BUNGALOWS

PROCUREMENT & PACKAGING
OF ALL MATERIALS

INSTALLATION

FOR YOUR
HIGHWAY CROSSING
&
WAYSIDE SIGNAL
PROJECTS

DESIGNED TO YOUR SPECIFICATIONS

HIGHWAY CROSSING FLASHING LIGHT ASSEMBLY FOR 4 INCH MAST

L&W FLASHING LIGHT ASSEMBLY STANDARD SPECIFICATIONS

-12" INCANDESCENT FLASHER WITH 10V 25W BULB OR LED LAMPS
-4"X13FT SCHEDULE 40 ALUMINUM MAST
-JUNCTION BOX CROSSARM SLOT DRILLED AT 9' 6"
-PINNACLE OR BELL (Specify)
-4" CAST ALUMINUM JUNCTION BOX BASE 9-1/2" BOLT SPACING & AAR HARDWARE
(Junction Box Also Available with 11-11/16" Bolt Spacing)
-CAST ALUMINUM JUNCTION BOX CROSSARMS WIRED WITH AAR HARDWARE
-RAILROAD CROSSING SIGN WITH ENGINEERING GRADE
REFLECTIVE TAPE AND MOUNTING HARDWARE
(RR Crossing Sign Also Available with High Intensity Reflective Tape)

ONE WAY

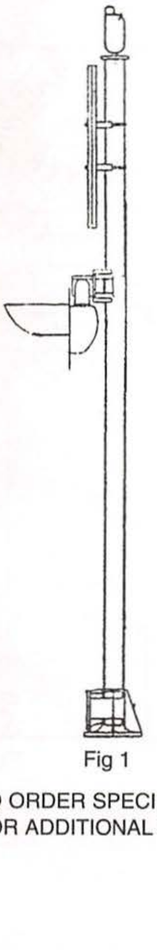
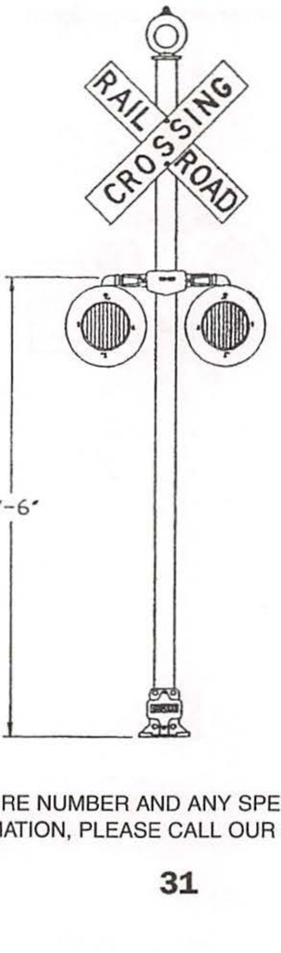


Fig 1



TWO WAY

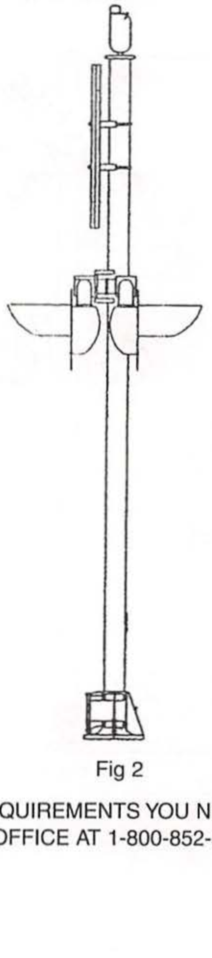


Fig 2

TO ORDER SPECIFY FIGURE NUMBER AND ANY SPECIAL REQUIREMENTS YOU NEED.
FOR ADDITIONAL INFORMATION, PLEASE CALL OUR SALES OFFICE AT 1-800-852-5587

L & W INDUSTRIES

HIGHWAY CROSSING FLASHING LIGHT ASSEMBLY FOR 4 INCH MAST WITH SIDE LIGHTS

L&W FLASHING LIGHT ASSEMBLY STANDARD SPECIFICATIONS

-12" INCANDESCENT FLASHER WITH 10V 25W BULB OR LED LAMPS
-4"X15FT SCHEDULE 40 ALUMINUM MAST
-JUNCTION BOX CROSSARM SLOT DRILLED AT 9'- 6"
-PINNACLE OR BELL (specify)
-4" CAST ALUMINUM JUNCTION BOX BASE 9-1/2" BOLT SPACING& AAR HARDWARE
(Junction Box Also Available with 11-11/16" Bolt Spacing)
-CAST ALUMINUM JUNCTION BOX CROSSARMS WIRED WITH AAR HARDWARE
-RAILROAD CROSSING SIGN WITH ENGINEERING GRADE
REFLECTIVE TAPE AND MOUNTING HARDWARE
(RR Crossing Signs Also Available with High Intensity Reflective Tape)

ONE WAY

(Specify Location of Side Lights)

TWO WAY

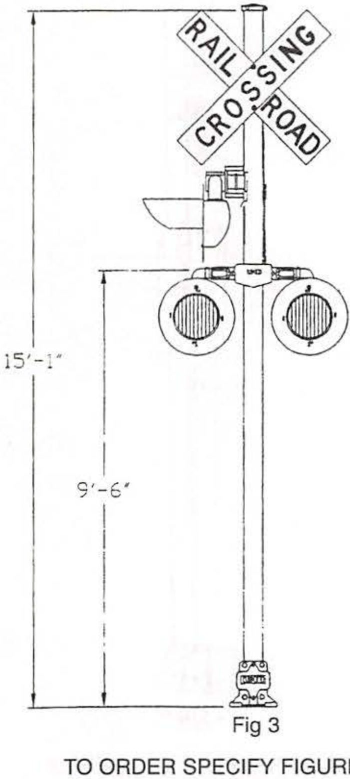
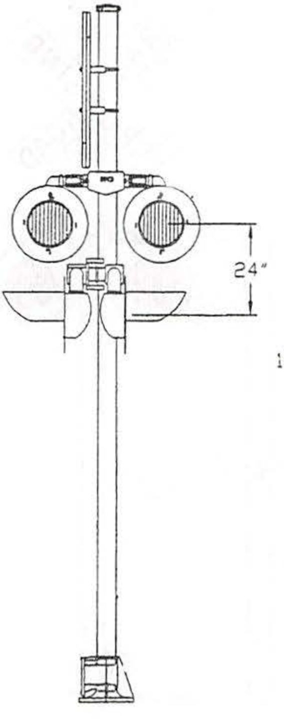


Fig 3



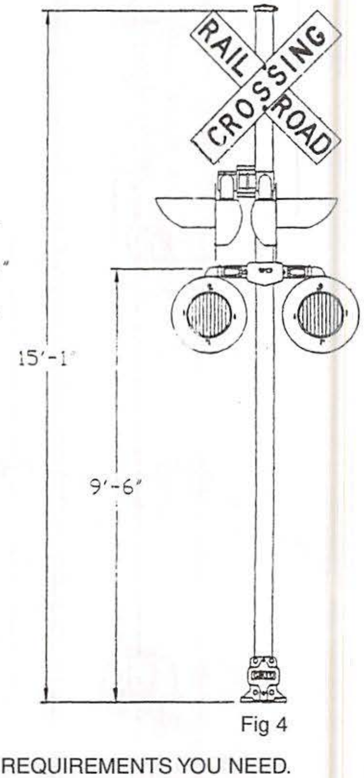


Fig 4

TO ORDER SPECIFY FIGURE NUMBER AND ANY SPECIAL REQUIREMENTS YOU NEED.
FOR ADDITIONAL INFORMATION, PLEASE CALL OUR SALES OFFICE AT 1-800-852-5587

HIGHWAY CROSSING FLASHING LIGHT ASSEMBLY FOR 5 INCH MAST

L&W FLASHING LIGHT ASSEMBLY STANDARD SPECIFICATIONS

-12" INCANDESCENT WITH 10V 25W BULB OR LED LAMPS
-5"X15FT SCHEDULE 80 ALUMINUM MAST
-JUNCTION BOX CROSSARM SLOT DRILLED AT 9' 6"
-PINNACLE OR BELL (Specify)
-5"CAST ALUMINUM JUNCTION BOX BASE 11-11/16"" BOLT SPACING & AAR HARDWARE
-CAST ALUMINUM CROSSARMS WIRED WITH AAR HARDWARE
-RAILROAD CROSSING SIGN WITH ENGINEERING GRADE
REFLECTIVE TAPE AND MOUNTING HARDWARE
(RR Crossing Signs Also Available with High Intensity Tape)

ONE WAY

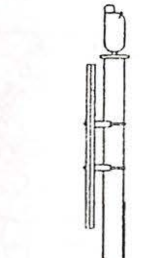
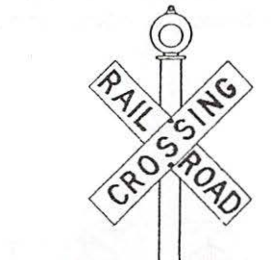


Fig 5



TWO WAY

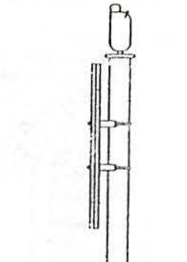


Fig 6

TO ORDER SPECIFY FIGURE NUMBER AND ANY SPECIAL REQUIREMENTS YOU NEED.
FOR ADDITIONAL INFORMATION, PLEASE CALL OUR SALES OFFICE AT 1-800-852-5587

L & W INDUSTRIES

HIGHWAY CROSSING FLASHING LIGHT ASSEMBLY FOR 5 INCH MAST WITH SIDE LIGHTS

L&W FLASHING LIGHT ASSEMBLY STANDARD SPECIFICATIONS

-12" INCANDESCENT WITH 10V 25W BULB OR LED LAMPS
5"X15FT SCHEDULE 80 ALUMINUM MAST
-JUNCTION BOX CROSSARM SLOT DRILLED AT 9' 6"
-PINNACLE OR BELL (Specify)
-5" CAST ALUMINUM JUNCTION BOX BASE 11-11/16" BOLT SPACING & AAR HARDWARE
-CAST ALUMINUM CROSSARMS WIRED WITH AAR HARDWARE
-RAILROAD CROSSING SIGN WITH ENGINEERING GRADE
REFLECTIVE TAPE AND MOUNTING HARDWARE
(RR Crossing Signs Also Available with High Intensity Tape)

ONE WAY

TWO WAY

(Specify Location of Side Lights)

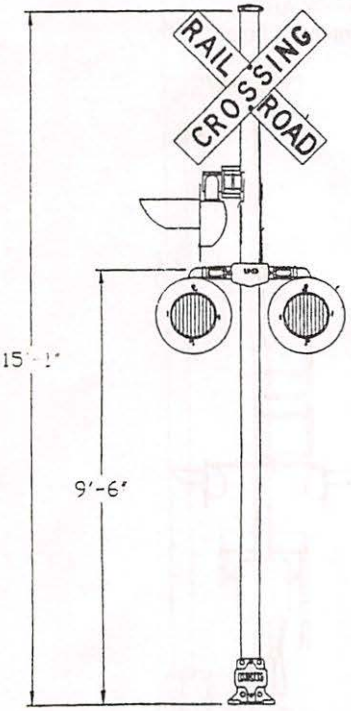
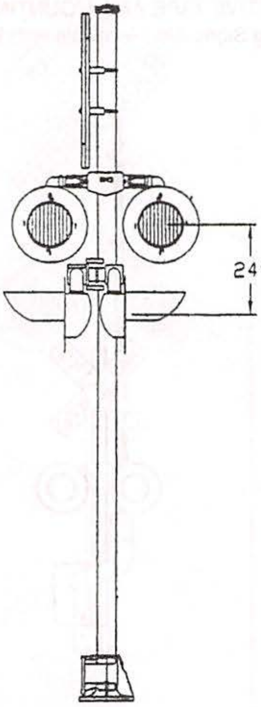


Fig 7



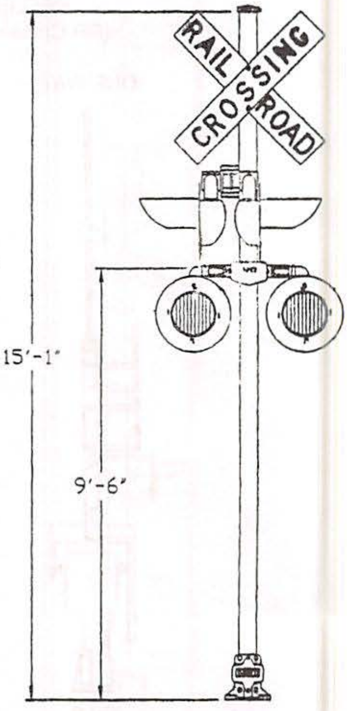


Fig 8

TO ORDER SPECIFY FIGURE NUMBER AND ANY SPECIAL REQUIREMENTS.
FOR ADDITIONAL INFORMATION, PLEASE CALL OUR SALES OFFICE AT 1-800-852-5587

HIGHWAY CROSSING FLASHING LIGHT & GATE MECHANISM ASSEMBLY

L&W FLASHING LIGHT/GATE ASSEMBLY STANDARD SPECIFICATIONS

-MODEL S40, WCH, OR MODEL 75 GATE MECHANISM
-COUNTERWEIGHTS FOR 32FT ALUMINUM FIBERGLASS GATE
-16FT-32 FT ALUMINUM FIBERGLASS GATE WITH ENGINEERING GRADE TAPE
(Gates Are Also Available with High Intensity Reflective Tape)
-4" GATE LAMPS (No Drilling Required To Mount)
-CONVERSION BRACKET & CAST BREAKAWAY
-12" INCANDESCENT WITH 10V 25W BULB OR LED LAMPS (Specify)
-5"X15FT SCHEDULE 80 ALUMINUM MAST WITH PINNACLE OR BELL (Specify)
-JUNCTION BOX CROSSARM SLOT DRILLED AT 9' 6"
-5" CAST ALUMINUM JUNCTION BOX BASE 11-11/16" BOLT SPACING & AAR HARDWARE
-CAST ALUMINUM JUNCTION BOX CROSSARMS WIRED WITH AAR HARDWARE
-RAILROAD CROSSING SIGN WITH ENGINEERING GRADE
REFLECTIVE TAPE AND MOUNTING HARDWARE
(RR Crossing Signs Also Available with High Intensity Tape)

ONE WAY

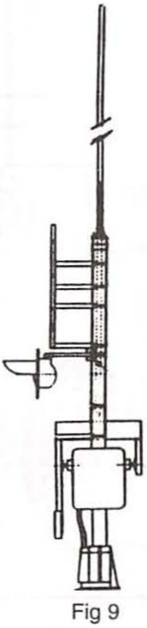
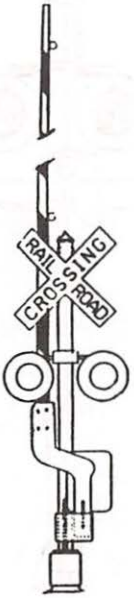


Fig 9



TWO WAY

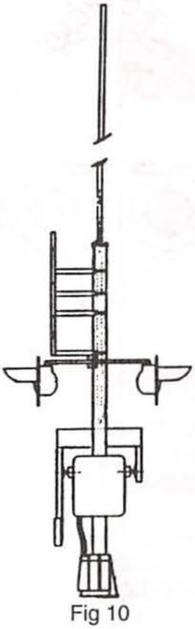


Fig 10

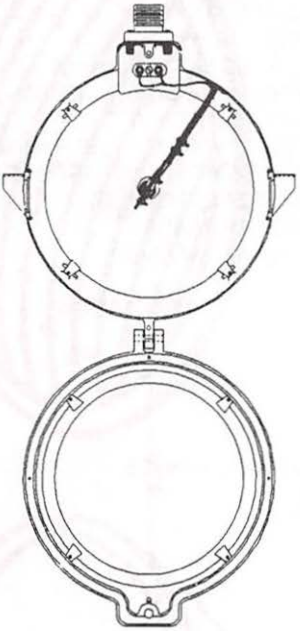
TO ORDER SPECIFY FIGURE NUMBER AND ANY SPECIAL REQUIREMENTS YOU NEED.
FOR ADDITIONAL INFORMATION, PLEASE CALL OUR SALES OFFICE AT 1-800-852-5587

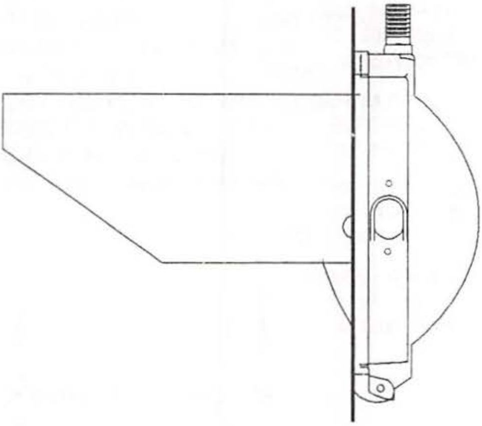
L & W INDUSTRIES

12 INCH FLASHING LIGHT ASSEMBLY
INCANDESCENT & LED

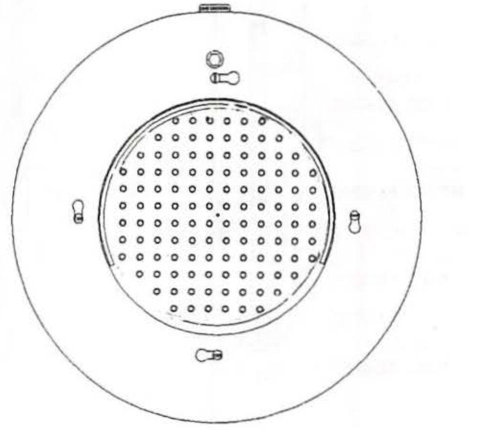
L&W INCANDESCENT AND LED FLASHERS CONSIST OF A CAST ALUMINUM HOUSING WITH STEEL HOODS AND BACKGROUNDS POWDER COAT PAINTED FLAT BLACK. INCANDESCENT LAMPS COME WITH 10V 25W BULB, 15/30, 70 OR 20/32 DEGREE LENS AND GLASS MIRROR.

INCANDESCENT





LED



12" LED FLASHER
LW PART NO. 6B6200-XL

12" INCANDESCENT FLASHER
WITH 15/30 DEGREE LENSES
LW PART NO. 6B6200-X

12" INCANDESCENT FLASHER
WITH 70 DEGREE LENSES
LW PART NO. 6B6200-1X

12" INCANDESCENT FLASHER
WITH 20/32 DEGREE LENSES
LW PART NO. 6B6200-4X

HIGHWAY CROSSING FLASHING LIGHT REPLACEMENT PARTS

8" & 12" FLASHER LENSES

LENS FLASHER 8" RED
LEXAN 15-30 DEGREE
LW PART NO. 7B5094

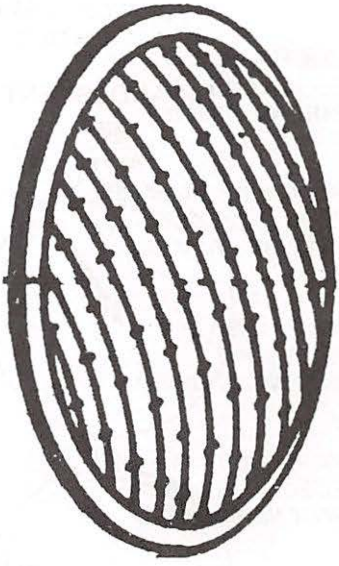
LENS FLASHER 8" RED
LEXAN 20-32 DEGREE
LW PART NO. 7B5093

LENS FLASHER 8" RED
LEXAN 70 DEGREE
LW PART NO. 7B5092

LENS FLASHER 12" RED
LEXAN 15-30 DEGREE
LW PART NO. 7B5292

LENS FLASHER 12" RED
LEXAN 20-32 DEGREE
LW PART NO. 7B5293

LENS FLASHER 12" RED
LEXAN 70 DEGREE
LW PART NO. 7B5294



SEE CATALOG SECTION K FOR ADDITIONAL LENSES

MIRRORS

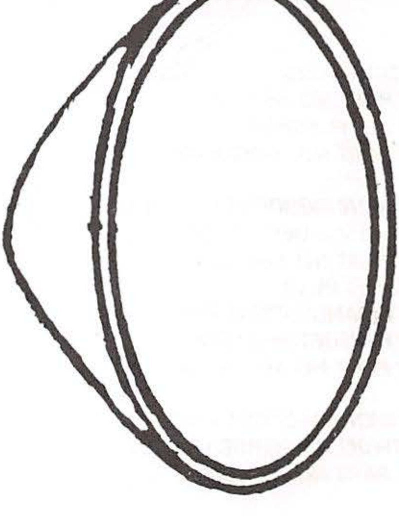
MIRROR 8" GLASS
LW PART NO. 6B5006

MIRROR 8" PLASTIC
LW PART NO. 6B5006-1

MIRROR 12" GLASS
DEEP DISH
LW PART NO. 6B6206

MIRROR 12" GLASS
SHALLOW DISH
LW PART NO. 6B5206

MIRROR 12" PLASTIC
SHALLOW DISH
LW PART NO. 6B6207



L & W INDUSTRIES

HIGHWAY CROSSING FLASHING LIGHT REPLACEMENT PARTS

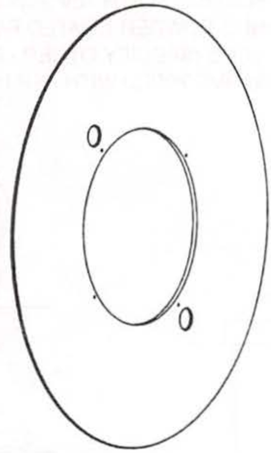
8" & 12" FLASHER HOODS & BACKGROUNDS

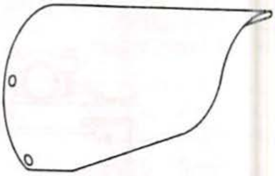
HOOD 8" FLASHER
STEEL- 10" LONG
LW PART NO. 6B5026S

BACKGROUND 8" FLASHER
STEEL-20" DIAMETER
LW PART NO. 6B5025S

HOOD 12" FLASHER
STEEL-12" LONG
LW PART NO. 6B5224S-X

BACKGROUND 12" FLASHER
STEEL-24" DIAMETER
LW PART NO. 6B5223S-X



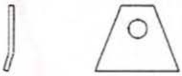


MISCELLANEOUS FLASHER PARTS

GASKET MIRROR
LW PART NO. 6B6206A

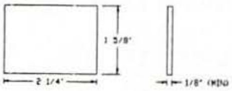
GASKET LENS
LW PART NO. 6B70627

CLIP LENS
LW PART NO. 6N5207



SOCKET BULB
WITH WIRE & EYELETS
LW PART NO. 6P5012-X

SIDE LIGHT LENS
LW PART NO. 7B6203

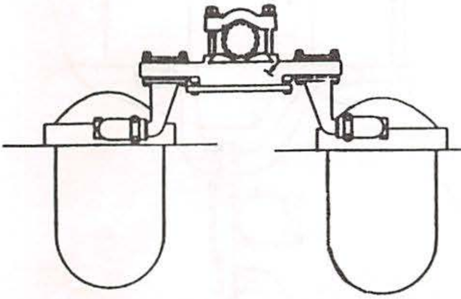


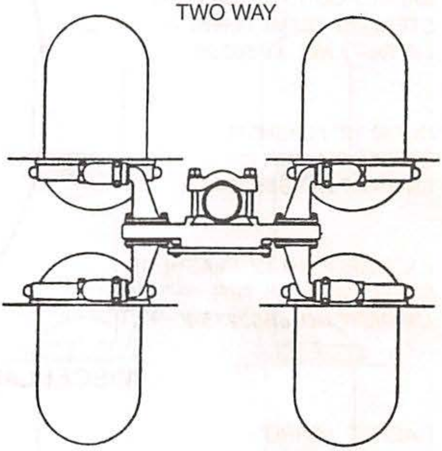
FOR REPLACEMENT BULBS SEE SECTION K

FLASHING LIGHT & CROSSARM JUNCTION BOX ASSEMBLY

L&W FLASHING LIGHT & CROSSARM ASSEMBLY STANDARD SPECIFICATIONS

-12" INCANDESCENT LAMP PREFOCUSED WITH 10V 25W BULB OR LED LAMPS (Specify)
-HOOD & BACKGROUNDS POWDER COATED PAINTED FLAT BLACK
-15/30 DEGREE LEXAN LENS (SPECIFY OTHER LENSES IF REQUIRED)
-CAST ALUMINUM JUNCTION BOX CROSSARMS WIRED WITH AAR HARDWARE & THREADED EXTENSIONS


ONE WAY


TWO WAY

ONE WAY

MAST SIZE	INCANDESCENT	LED
4" MAST	6A6210-X	6A6210-XL
5" MAST	6A6210-1X	6A6210-1XL
8" MAST	6A6210-3X	6A6210-3XL
10"MAST	6A6210-4X	6A6210-4XL
12"MAST	6A6210-5X	6A6210-5XL

TWO WAY

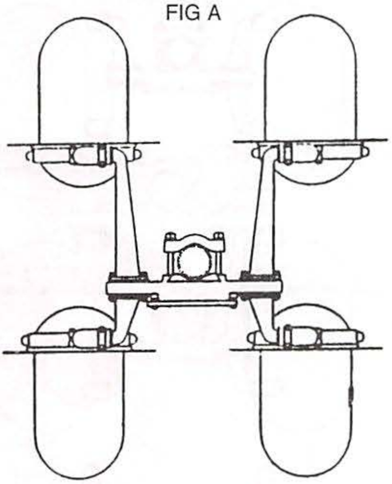
MAST SIZE	INCANDESCENT	LED
4" MAST	6A6215-X	6A6215-XL
5" MAST	6A6215-1X	6A6215-1XL
8" MAST	6A6215-3X	6A6215-3XL
10"MAST	6A6215-4X	6A6215-4XL
12"MAST	6A6215-5X	6A6215-5XL

FLASHING LIGHT & CROSSARM JUNCTION BOX ASSEMBLY FOR GATE APPLICATION

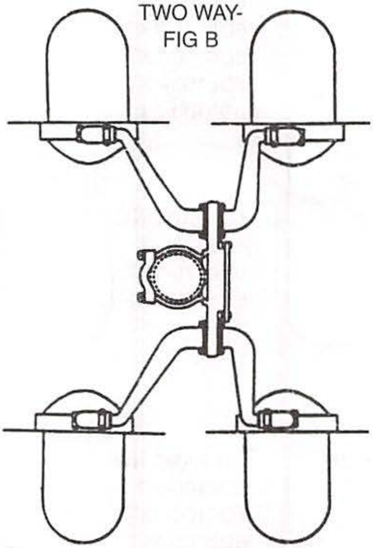
L&W FLASHING LIGHT & CROSSARM ASSEMBLIES STANDARD SPECIFICATIONS

-12" INCANDESCENT LAMP PREFOCUSED WITH 10V 25W BULB OR LED LAMPS (Specify)
-HOOD & BACKGROUNDS POWDER COATED PAINTED FLAT BLACK
-15/30 DEGREE LEXAN LENS (SPECIFY OTHER LENSES IF REQUIRED)
-CAST ALUMINUM JUNCTION BOX CROSSARMS WIRED WITH AAR HARDWARE & THREADED EXTENSIONS

TWO WAY-
FIG A



TWO WAY-
FIG B



TWO WAY-FIG A

MAST SIZE	INCANDESCENT	LED
4" MAST	6A6247-X	6A6247-XL
5" MAST	6A6247-1X	6A6247-1XL
8" MAST	6A6247-3X	6A6247-3XL
10"MAST	6A6247-4X	6A6247-4XL
12"MAST	6A6247-5X	6A6247-5XL

TWO WAY-FIG B

MAST SIZE	INCANDESCENT	LED
4" MAST	6A6232-X	6A6232-XL
5" MAST	6A6232-1X	6A6232-1XL
8" MAST	6A6232-3X	6A6232-3XL
10"MAST	6A6232-4X	6A6232-4XL
12"MAST	6A6232-5X	6A6232-5XL

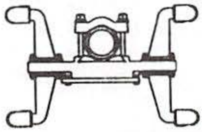
L & W INDUSTRIES

JUNCTION BOX CROSSARM ASSEMBLIES

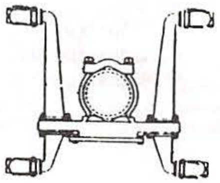
L&W JUNCTION BOX CROSSARMS ARE MANUFACTURED FROM CAST ALUMINUM & COME COMPLETE WITH THREADED EXTENSIONS, MOUNTING HARDWARE & AAR TERMINALS WITH ALL HARDWARE.

TWO WAY CROSSARMS

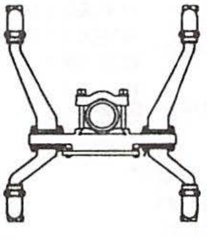
MAST SIZE	LW PART NO
4"	6D6100-XT
5"	6D6100-1XT
8"	6D6100-3XT
10"	6D6100-4XT
12"	6D6100-5XT



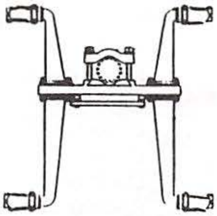
MAST SIZE	LW PART NO
4"	6D6170-XT
5"	6D6170-1XT
8"	6D6170-3XT
10"	6D6170-4XT
12"	6D6170-5XT



MAST SIZE	LW PART NO
4"	6D6160-XT
5"	6D6160-1XT
8"	6D6160-3XT
10"	6D6160-4XT
12"	6D6160-5XT



MAST SIZE	LW PART NO
4"	6D6175-XT
5"	6D6175-1XT
8"	6D6175-3XT
10"	6D6175-4XT
12"	6D6175-5XT

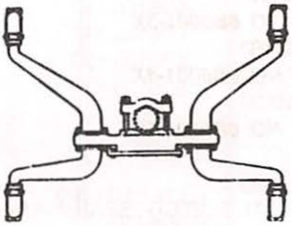


JUNCTION BOX CROSSARM ASSEMBLIES

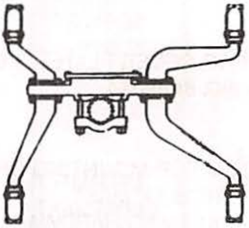
L&W JUNCTION BOX CROSSARMS ARE MANUFACTURED FROM CAST ALUMINUM & COME COMPLETE WITH THREADED EXTENSIONS, MOUNTING HARDWARE & AAR TERMINALS WITH ALL HARDWARE.

TWO WAY CROSSARMS

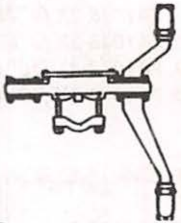
MAST SIZE	LW PART NO
4"	6D6151-XT
5"	6D6151-1XT
8"	6D6151-3XT
10"	6D6151-4XT
12"	6D6151-5XT



MAST SIZE	LW PART NO
4"	6D6150-XT
5"	6D6150-1XT
8"	6D6150-3XT
10"	6D6150-4XT
12"	6D6150-5XT

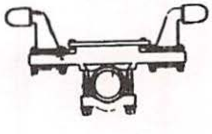


MAST SIZE	LW PART NO
4"	6D6060-XT
5"	6D6060-1XT
8"	6D6060-3XT
10"	6D6060-4XT
12"	6D6060-5XT



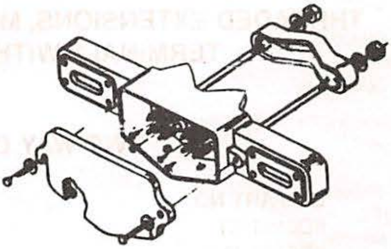
ONE WAY CROSSARM ASSEMBLIES

MAST SIZE	LW PART NO
4"	6D6000-XT
5"	6D6000-1XT
8"	6D6000-3XT
10"	6D6000-4XT
12"	6D6000-5XT

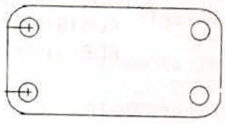


JUNCTION BOX CROSSARM
REPLACEMENT PARTS

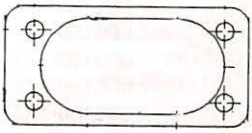
JUNCTION BOX CROSSARM LESS
ELBOWS & EXTENSIONS WITH COVER
AAR TERMINALS & HDW
MAST MOUNTING BRACKET
FOR 4" OR 5" MAST
LW PART NO. 6B6001-X
FOR 6" MAST
LW PART NO. 6B6001-2X
FOR 8" MAST
LW PART NO. 6B6001-3X
FOR 10" MAST
LW PART NO. 6B6001-4X
FOR 12" MAST
LW PART NO. 6B6001-5X



COVER PLATE FOR CROSSARM JUNCTION BOX
LW PART NO. 6B6006

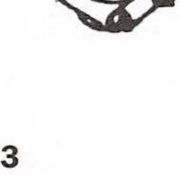


GASKET FOR COVER PLATES & EXTENSIONS
LW PART NO. 6B6004A



SPLIT BOLTS FOR MOUNTING CROSSARMS
FOR 6", 8", 10" & 12" MAST
WITH BRACKET AND HARDWARE
LW PART NO. 7A1048-2X (6" MAST)
LW PART NO. 7A1048-3X (8"MAST)
LW PART NO. 7A1048-4X (10" MAST)
LW PART NO. 7A1048-5X (12" MAST)

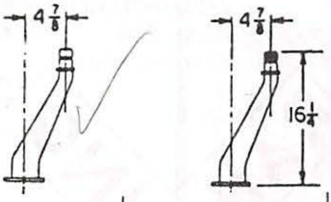
SUPPORT BRACKETS/ELBOW
CLAMP TYPE
LW PART NO. 6B6005-X



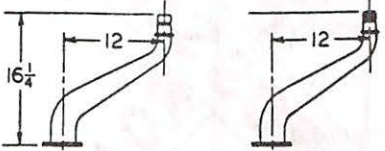
SUPPORT BRACKET/ELBOW
THREADED TYPE
LW PART NO. 6B6009-X

JUNCTION BOX CROSSARM REPLACEMENT ELBOWS & EXTENSIONS

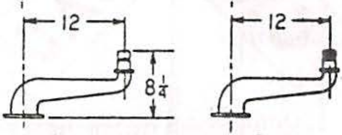
EXTENSION BRACKET 16-1/4" LONG
WITH 4-7/8" OFFSET
CLAMP TYPE
LW PART NO. 6B6004-1
THREADED TYPE
LW PART NO. 6B6004-1T



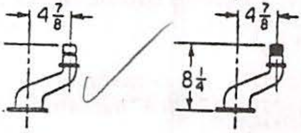
EXTENSION BRACKET 16-1/4" LONG
WITH 12" OFFSET
CLAMP TYPE
LW PART NO. 6B6004-2
THREADED TYPE
LW PART NO. 6B6004-2T



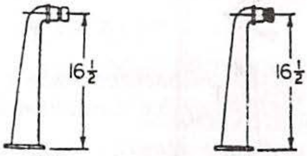
EXTENSION BRACKET 8-1/4" LONG
WITH 12" OFFSET
CLAMP TYPE
LW PART NO. 6B6004-3
THREADED TYPE
LW PART NO. 6B6004-3T



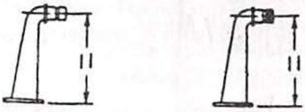
EXTENSION BRACKET 8-1/4" LONG
WITH 4-7/8" OFFSET
CLAMP TYPE
LW PART NO. 6B6004-4
THREADED TYPE
LW PART NO. 6B6004-4T



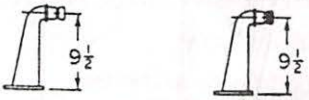
EXTENSION BRACKET 16-1/2" LONG
CLAMP TYPE
LW PART NO. 6B6004-5
THREADED TYPE
LW PART NO. 6B6004-5T



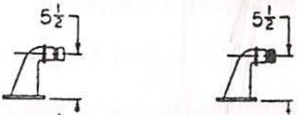
EXTENSION BRACKET 11" LONG
CLAMP TYPE
LW PART NO. 6B6004-6
THREADED TYPE
LW PART NO. 6B6004-6T



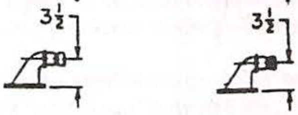
EXTENSION BRACKET 9-1/2" LONG
CLAMP TYPE
LW PART NO. 6B6004-7
THREADED TYPE
LW PART NO. 6B6004-7T



EXTENSION BRACKET 5-1/2" LONG
CLAMP TYPE
LW PART NO. 6B6004-8
THREADED TYPE
LW PART NO. 6B6004-8T



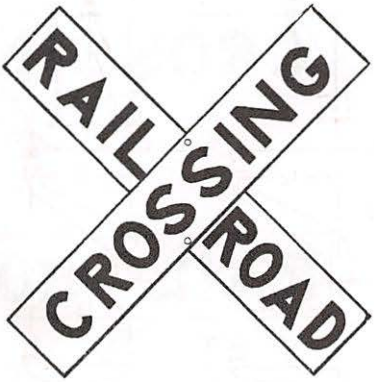
EXTENSION BRACKET 3-1/2" LONG
CLAMP TYPE
LW PART NO. 6B6004
THREADED TYPE
LW PART NO. 6B6004-T

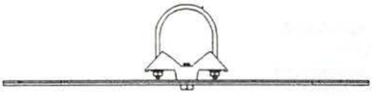


RR CROSSING SIGNS FOR 4 & 5 INCH MASTS

RAILROAD CROSSING SIGNS ONLY-1 SIDED

MANUFACTURED FROM DURABLE EXTRUDED ALUMINUM





ENGINEERING GRADE REFLECTIVE TAPE WHITE WITH BLACK LETTERS
-NO HARDWARE

LW PART NO. 7A1061E (no backstripe)
LW PART NO. 7A1061E-6 (with 6" backstripe)

WITH 4" & 5" MAST MOUNTING HARDWARE

LW PART NO. 7A1061E4 (no backstripe with 4" mtg hdw)
LW PART NO. 7A1061E4-6 (with 6" backstripe & 4" mtg hdw)

LW PART NO. 7A1061E5 (no backstripe with 5" mtg hdw)
LW PART NO. 7A1061E5-6 (with 6" backstripe & 5" mtg hdw)

HIGH INTENSITY GRADE REFLECTIVE TAPE WHITE WITH BLACK LETTERS
-NO HARDWARE

LW PART NO. 7A1061H (no backstripe)
LW PART NO. 7A1061H-6 (with 6" backstripe)

WITH 4" & 5" MAST MOUNTING HARDWARE

LW PART NO. 7A1061H4 (no backstripe with 4" mtg hdw)
LW PART NO. 7A1061H4-6 (with 6" backstripe & 4" mtg hdw)

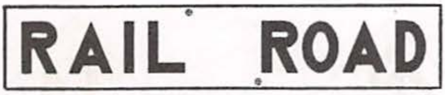
LW PART NO. 7A1061H5 (no backstripe with 5" mtg hdw)
LW PART NO. 7A1061H5-6 (with 6" backstripe & 5" mtg hdw)

L & W INDUSTRIES

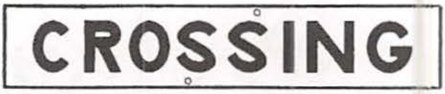
RR CROSSING SIGNS FOR 4 & 5 INCH MASTS

RAILROAD CROSSING SIGNS ONLY-2 SIDED

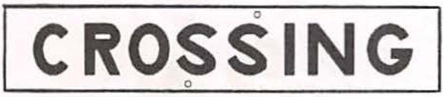
DURABLE EXTRUDED ALUMINUM-DOG BONE SHAPE



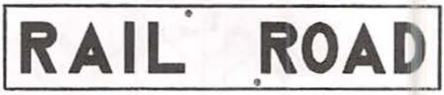
BACK SIDE



BACK SIDE



FRONT SIDE

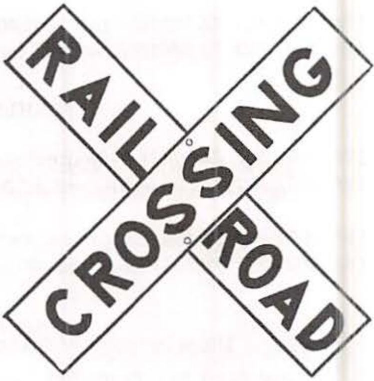


FRONT SIDE

WHITE ENGINEERING GRADE REFLECTIVE TAPE
BLACK LETTERS

NO HARDWARE
LW PART NO. 7A1067E-TS

WITH 4"& 5" MAST MOUNTING HARDWARE
LW PART NO. 7A1067E4-TS (with 4" mounting hardware)
LW PART NO. 7A1067E5-TS (with 5" mounting hardware)



WHITE HIGH INTENSITY GRADE REFLECTIVE TAPE
BLACK LETTERS

NO HARDWARE
LW PART NO. 7A1067H-TS

WITH 4" & 5" MAST MOUNTING HARDWARE
LW PART NO. 7A1067H4-TS (with 4" mounting hardware)
LW PART NO. 7A1067H5-TS (with 5" mounting hardware)

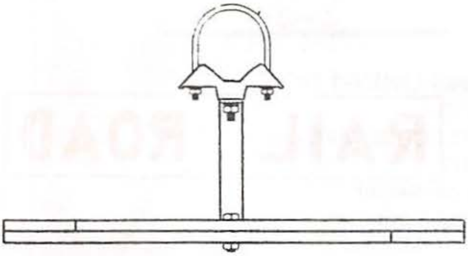
WHITE HIGH DIAMOND GRADE REFLECTIVE TAPE
BLACK LETTERS

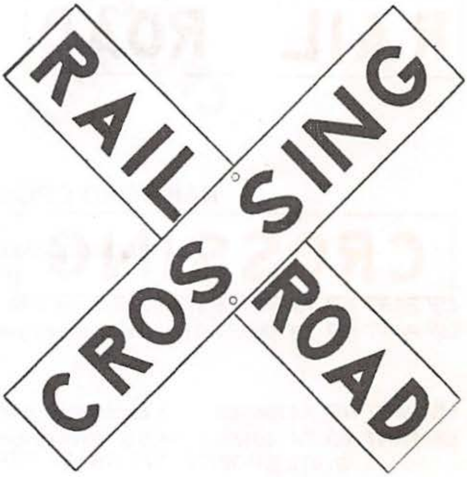
NO HARDWARE
LW PART NO. 7A1067D-TS

WITH 4" & 5" MAST MOUNTING HARDWARE
LW PART NO. 7A1067D4 -TS (with 4" mounting hardware)
LW PART NO. 7A1067D5-TS (with 5" mounting hardware)

RAILROAD CROSSING SIGNS WITH 5" MAST MOUNTING HARDWARE & 10-1/2 EXTENSION FOR GATE APPLICATIONS

RAILROAD CROSSING SIGNS-ONE SIDED





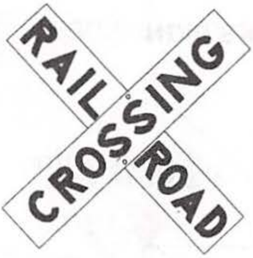
ENGINEERING GRADE REFLECTIVE TAPE

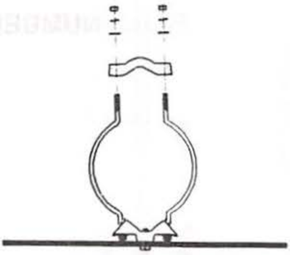
LW PART NO. 7A1062E5 (no backstripe with 5" mounting hardware & 10-1/2" extension)
LW PART NO. 7A1062E5-6 (with 6" backstripe & 5" mounting hardware & 10-1/2" extension)

HIGH INTENSITY GRADE REFLECTIVE TAPE

LW PART NO. 7A1062H5 (no backstripe with 5" mounting hardware & 10-1/2" extension)
LW PART NO. 7A1062H5-6 (with 6" backstripe & 5" mounting hardware & 10-1/2" extension)

RAILROAD CROSSING SIGNS WITH MOUNTING HARDWARE FOR 6", 8", 10" & 12" MASTS





RAILROAD CROSSING SIGNS ONLY-1 SIDED

ENGINEERING GRADE REFLECTIVE TAPE

6" MAST MOUNT

LW PART NO. 7A1061E6 (no backstripe with 6" mounting hardware)
LW PART NO. 7A1061E6-6 (with 6" backstripe & 6" mounting hardware)

8" MAST MOUNT

LW PART NO. 7A1061E8 (no backstripe & 8" mounting hardware)
LW PART NO. 7A1061E8-6 (with 6" backstripe & 8" mounting hardware)

10" MAST MOUNT

LW PART NO. 7A1061E10 (no backstripe & 10" mounting hardware)
LW PART NO. 7A1061E10-6 (with 6" backstripe & 10" mounting hardware)

12" MAST MOUNT

LW PART NO. 7A1061E12 (no backstripe with 12" mounting hardware)
LW PART NO. 7A1061E12-6 (with 6" backstripe & 12" mounting hardware)

WHITE HIGH INTENSITY GRADE REFLECTIVE TAPE

6" MAST MOUNT

LW PART NO. 7A1061H6 (no backstripe with 6" mounting hardware)
LW PART NO. 7A1061H6-6 (with 6" backstripe & 6" mounting hardware)

8" MAST MOUNT

LW PART NO. 7A1061H8 (no backstripe & 8" mounting hardware)
LW PART NO. 7A1061H8-6 (with 6" backstripe & 8" mounting hardware)

10" MAST MOUNT

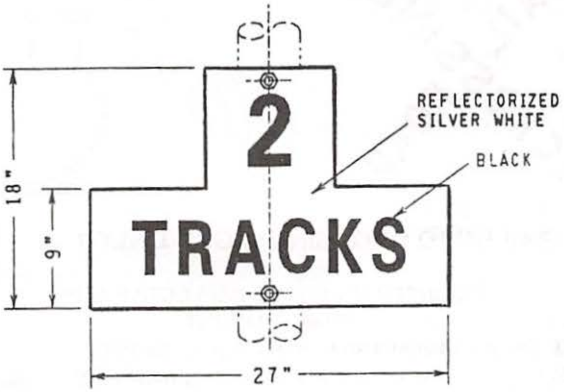
LW PART NO. 7A1061H10 (no backstripe & 10" mounting hardware)
LW PART NO. 7A1061H10-6 (with 6" backstripe & 10" mounting hardware)

12" MAST MOUNT

LW PART NO. 7A1061H12 (no backstripe with 12" mounting hardware)
LW PART NO. 7A1061H12-6 (with 6" backstripe & 12" mounting hardware)

ADDITIONAL SIGNS FOR GRADE CROSSINGS

NUMBER OF TRACKS SIGN



ENGINEERING GRADE REFLECTIVE TAPE

BLACK NUMBERS
ALUMINUM
NO MOUNTING HARDWARE
# = SPECIFY NUMBER OF TRACKS
LW PART NO. 7A1050E# (no mounting hardware)

WITH MOUNTING HARDWARE
LW PART NO. 7A1050E#4   (with 4" mounting hardware)
LW PART NO. 7A1050E#5   (with 5" mounting hardware)
LW PART NO. 7A1050E#6   (with 6" mounting hardware)
LW PART NO. 7A1050E#8   (with 8" mounting hardware)
LW PART NO. 7A1050E#10 (with 10" mounting hardware)
LW PART NO. 7A1050E#12 (with 12" mounting hardware)

HIGH INTENSITY GRADE REFLECTIVE TAPE

BLACK NUMBERS
ALUMINUM
NO MOUNTING HARDWARE
# = SPECIFY NUMBER OF TRACKS
LW PART NO. 7A1050H# (no mounting hardware)

WITH MOUNTING HARDWARE
LW PART NO. 7A1050H#4   (with 4" mounting hardware)
LW PART NO. 7A1050H#5   (with 5" mounting hardware)
LW PART NO. 7A1050H#6   (with 6" mounting hardware)
LW PART NO. 7A1050H#8   (with 8" mounting hardware)
LW PART NO. 7A1050H#10 (with 10" mounting hardware)
LW PART NO. 7A1050H#12 (with 12" mounting hardware)

PLEASE CONTACT THE L&W SALES OFFICE AT 1-800-852-5587
FOR ANY ADDITIONAL SIGNS YOU MAY REQUIRE.

SIGN MOUNTING HARDWARE

4" AND 5" MASTS

J070205-1428

4" DIA SIGN MOUNTING CLAMP & U-BOLT
5/8" X 3" SIGN MOUNTING BOLT & HARDWARE
LW PART NO. 7A1041-X
LW PART NO. 7A1041-X-P2 (KIT OF 2)

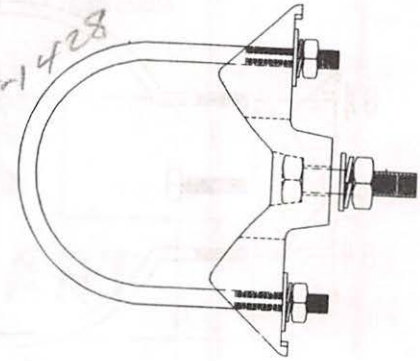
5" DIA SIGN MOUNTING CLAMP & U-BOLT
5/8" X 3" SIGN MOUNTING BOLT & HARDWARE
LW PART NO. 7A1041-1X
LW PART NO. 7A1041-1X-P2 (KIT OF 2)

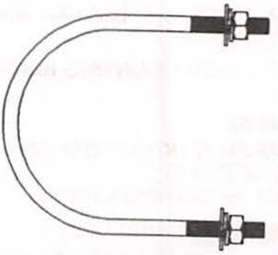
4" DIA SIGN MOUNTING CLAMP & U-BOLT
7/16" X 3" SIGN MOUNTING BOLT & HARDWARE
LW PART NO. 7A1041-X1
LW PART NO. 7A1041-X1-P2 (KIT OF 2)

5" DIA SIGN MOUNTING CLAMP & U-BOLT
7/16" X 3" SIGN MOUNTING BOLT & HARDWARE
LW PART NO. 7A1041- 1X1
LW PART NO. 7A1041-1X1-P2 (KIT OF 2)

4" DIA U-BOLT ONLY 1/2" DIA
W/NUT & WASHER
LW PART NO, 7A1044-X

5" DIA U-BOLT ONLY 1/2" DIA
W/NUT & WASHERS
LW PART NO. 7A1043-X





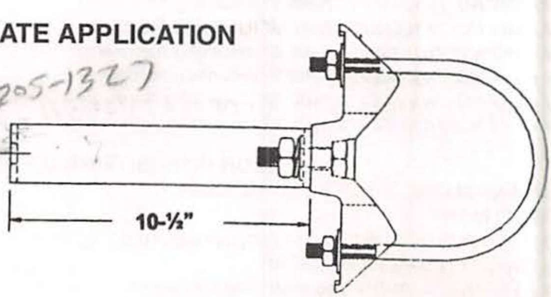
5" MAST GATE APPLICATION

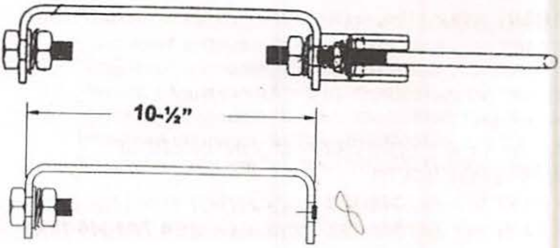
J070205-1327

5" DIA SIGN MOUNTING CLAMP & U-BOLT
FOR GATE APPLICATION
5/8"-11 X 3" SIGN MOUNTING BOLT
& HARDWARE
10-1/2" LONG SIGN EXTENSION BRACKET
LW PART NO. 7A1040-9X
LW PART NO. 7A1040-9X-P2 (KIT OF 2)

5" DIA SIGN MOUNTING CLAMP & U-BOLT
FITS 5" MASTS
7/16"-14 X 3" SIGN MOUNTING BOLT
& HARDWARE
10-1/2" LONG SIGN EXTENSION BRACKET
LW PART NO. 7A1040-6X
LW PART NO. 7A1040-6X-P2 (KIT OF 2)

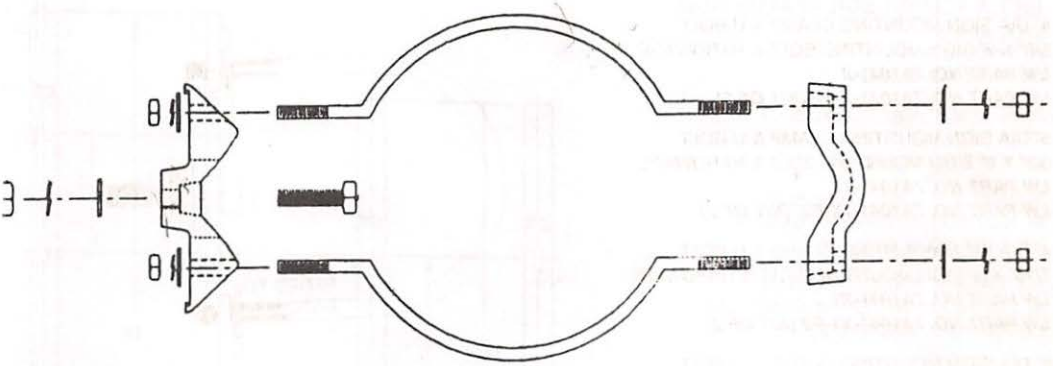
10-1/2" EXTENSION ONLY
W/5/8" X 3" SIGN MTG BOLT
LW PART NO. 7A1042-X





L & W INDUSTRIES

SPLIT BOLT SIGN MOUNTING BRACKETS FOR 8", 10" & 12" MASTS



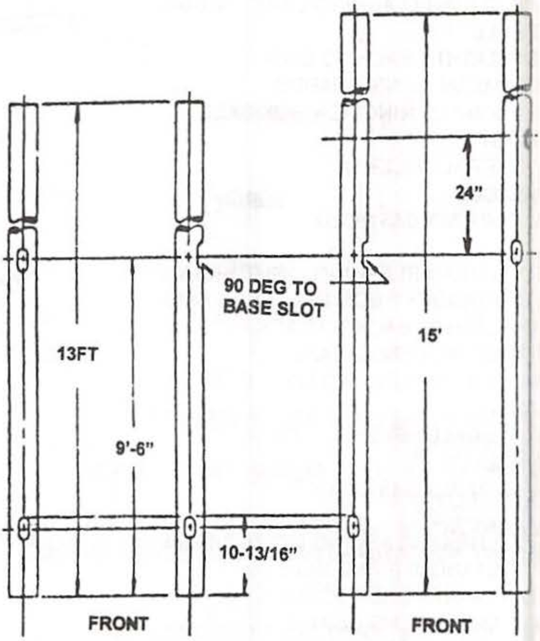
SIGN MOUNTING SPLIT BOLT ASSEMBLY
FITS 6" MAST
1EA 5/8" -11 X 3" LONG SIGN MOUNTING BOLT
2EA 6" SPLIT BOLTS
LW PART NO. 7A1045-6X
LW PART NO. 7A1045-6X-P2 (KIT OF 2EA 7A1045-6X)

SIGN MOUNTING SPLIT BOLT ASSEMBLY
FITS 8" MAST
1EA 5/8"-11 X 3" LONG SIGN MOUNTING BOLT
2EA 8" SPLIT BOLTS
LW PART NO. 7A1046-8X
LW PART NO. 7A1046-8X-P2 (KIT OF 2EA 7A1046-8X)

SIGN MOUNTING SPLIT BOLT ASSEMBLY
FITS 10" MAST
1EA 5/8" -11 X 3" LONG SIGN MOUNTING BOLT
2EA 10" SPLIT BOLTS
LW PART NO. 7A1047-10X
LW PART NO. 7A1047-10X-P2 (KIT OF 2EA 7A1047-10X) 4

SIGN MOUNTING SPLIT BOLT ASSEMBLY
FITS 12" MAST
1EA 5/8" -11 X 3" LONG SIGN MOUNTING BOLT
2EA 12" SPLIT BOLTS
LW PART NO. 7A1048-12X
LW PART NO. 7A1048-12X-P2 (KIT OF 2EA 7A1048-12X)

4" & 5" FLASHER MASTS, STUB MASTS, PINNACLES & POLE STEPS



13FT X 4" MAST SCH 40 ALUMINUM

SLOT AT 9' 6"
WITH BASE SLOT
LW PART NO. 5L5542

SLOT AT 9' 6" ADDITIONAL SLOT
AT 90 DEG RIGHT FROM BASE SLOT
LW PART NO. 5L5543-90

SLOT AT 9' 6" ADDITIONAL SLOT
AT 180 DEG RIGHT FROM BASE SLOT
LW PART NO. 5L5543-180

SLOT AT 9' 6" ADDITIONAL SLOT
AT 270 DEG RIGHT FROM BASE SLOT
LW PART NO. 5L5543-270

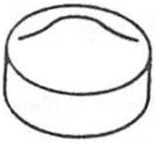
5" MAST X 15FT HIGH SCH 80 ALUMINUM

SLOT AT 9' 6" HIGH
WITH BASE SLOT
LW PART NO. 5L5544

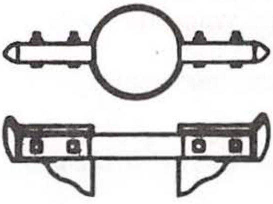
SLOT AT 9' 6" ADDITIONAL SLOT
AT 90 DEG RIGHT FROM BASE SLOT
LW PART NO. 5L5544-90

SLOT AT 9' 6" ADDITIONAL SLOT
AT 180 DEG RIGHT FROM BASE SLOT
LW PART NO. 5L5544-180

SLOT AT 9' 6" ADDITIONAL SLOT
AT 270 DEG RIGHT FROM BASE SLOT
LW PART NO. 5L5544-270

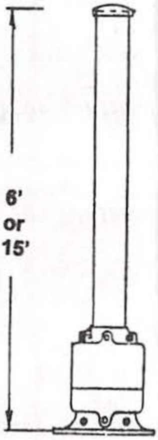


PINNACLE FOR 4" OR 5" MAST
WITH SET BOLT
LW PART NO. 5Z7500-X



POLE STEP FOR 4" MAST
LW PART NO. 6U7405-X

POLE STEP FOR 5" MAST
LW PART NO. 6U7405-1X



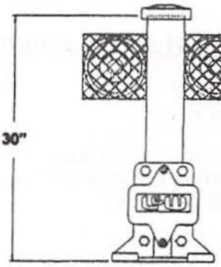
STUB MAST 5" X 6FT HIGH
WITH JUNCTION BOX BASE
LW PART NO. 5L5300-X

STUB MAST 5" X 15FT HIGH
WITH JUNCTION BOX BASE
LW PART NO. 5L5300-1X

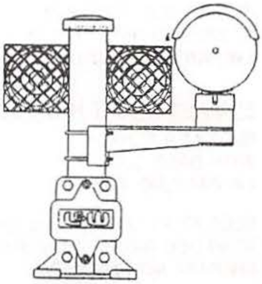
FOR ANY ADDITIONAL SIDE LIGHT HOLES REQUIRED, SPECIFY LOCATION IF THE MASTS SHOWN ABOVE DO NOT MEET YOUR SPECIFICATIONS, PLEASE CONTACT OUR SALES OFFICE FOR ADDITIONAL MASTS AVAILABLE.
FOR SPLIT AND JUNCTION BOX BASES, SEE SIGNAL BASES CATALOG SECTION F.
FOR SLOT COVER PLATES, SEE WAYSIDE SIGNAL CATALOG SECTION A.

L & W INDUSTRIES

PEDESTRIAN FLASHING LIGHT SIGNALS
NO LEFT TURN SIGNAL

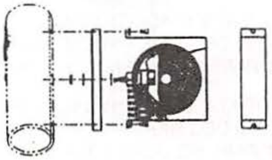


PEDESTRIAN FLASHING LIGHT SIGNAL
NO BELL
7" DIA LIGHTS BACK TO BACK
WITH METAL LENS GUARDS
9-1/2" X 9-1/2" JUNCTION BOX BASE
4" MAST
30" OVERALL HEIGHT
PINNACLE
LW PART NO. 6A5180-5X

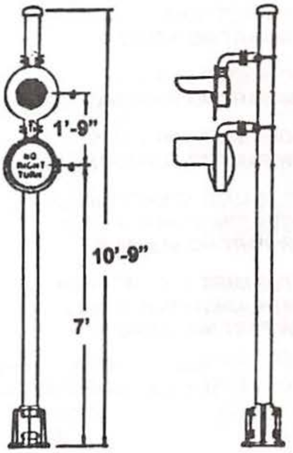


PEDESTRIAN FLASHING LIGHT SIGNAL
WITH STANDOFF FOR BELL/LESS BELL
7" DIA LIGHTS BACK TO BACK
WITH METAL LENS GUARDS
9-1/2" X 9-1/2" JUNCTION BOX BASE
4" MAST
30" OVERALL HEIGHT
PINNACLE3
LW PART NO. 6A5180-6X

PEDESTRIAN FLASHING LIGHT SIGNAL
WITH STANDOFF AND BELL
7" DIA LIGHTS BACK TO BACK
WITH METAL LENS GUARDS
9-1/2" X 9-1/2" JUNCTION BOX BASE
4" MAST
30" OVERALL HEIGHT
PINNACLE3
LW PART NO. 6A5180-7X



PEDESTRIAN SIGNAL REPLACEMENT LAMP KIT
INCLUDES GUARD, 7" LAMP, AND MOUNTING PLATE
LW PART NO. 6B5181-X



NO TURN SIGNAL
WITH 8" DIA MARKER LIGHT
12" DIA NO TURN LIGHT
4" SPLIT BASE
4" ALUM MAST
PINNACLE
LW PART NO. 6A5080-XL (NO LEFT TURN)
LW PART NO. 6A5080-XR (NO RIGHT TURN)

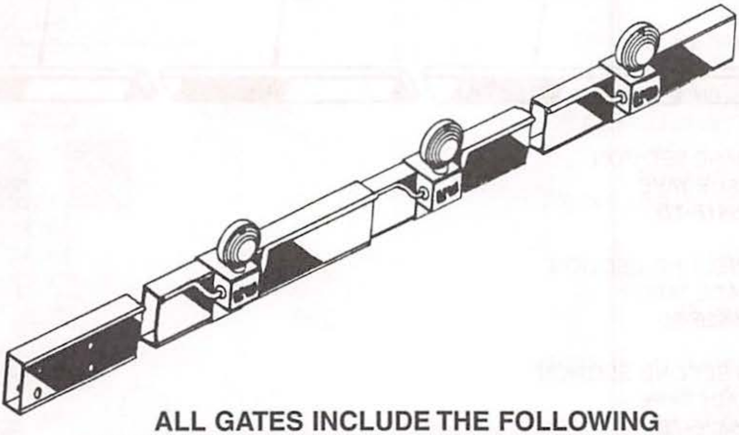
WITH 5" JB BASE & 5" ALUM MAST
LW PART NO. 6A5080-1XL (NO LEFT TURN)
LW PART NO. 6A5080-1XR (NO RIGHT TURN)

L & W INDUSTRIES

GATEARMS
ALUMINUM FIBERGLASS GATES

AG1 ALUMINUM/FIBERGLASS GATE
EASY FOR ONE MAN TO INSTALL

NO DRILLING REQUIRED TO ADJUST GATE LENGTH OR MOUNT GATE LAMPS
ADJUSTABLE FROM 16FT TO 32FT & 16FT TO 46FT LONG
INTERCHANGEABLE WITH OTHER MODELS OF ALUMINUM FIBERGLASS GATEARMS



ALL GATES INCLUDE THE FOLLOWING

****ENGINEERING OR HIGH INTENSITY GRADE REFLECTIVE TAPE****
****KIT OF 3EA 4" GATE LAMPS WITH CORD, WIRE TIES & ALUMINUM BOX (POLY BOX ALSO AVAILABLE) WITH STAINLESS STEEL ADJUSTABLE MOUNTING CLAMP (LW PART NO. 6P1017-28X-P3)****
****16FT ALUMINUM BASE SECTION-ALL HOLES PREDRILLED****
****12" ALUMINUM SUPPORT SLEEVE FOR BASE SECTION****
****16FT FIBERGLASS SECOND SECTION-ALL HOLES PREDRILLED****
****16FT FIBERGLASS THIRD SECTION FOR 16FT TO 46 GATE-ALL HOLES PREDRILLED****
****ALL REQUIRED MOUNTING HARDWARE****

ORDERING REFERENCES

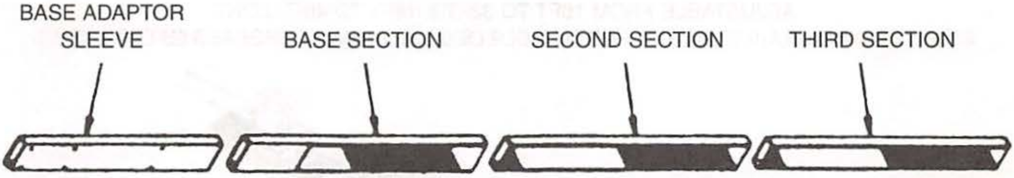
SIZE	DESCRIPTION	LW PART NO.
16FT-32FT	ENGINEERING GRADE TAPE W/4" LAMPS	6K1400E32T4
16FT-32FT	ENGINEERING GRADE TAPE NO LAMPS	6K1400432T
16FT-32FT	HIGH INTENSITY GRADE TAPE W/4" LAMPS	6K1400H32T4
16FT-32FT	HIGH INTENSITY GRADE TAPE NO LAMPS	6K1400H32T
16FT-46FT	ENGINEERING GRADE TAPE W/4" LAMPS	6K1400E46T4
16FT-46FT	ENGINEERING GRADE TAPE NO LAMPS	6K140046T
16FT-46FT	HIGH INTENSITY GRADE TAPE W/4" LAMPS	6K1400H46T4
16FT-46FT	HIGH INTENSITY GRADE TAPE NO LAMPS	6K1400H46T

SEE NEXT PAGE FOR REPLACEMENT PARTS BASES & SECTIONS

L & W INDUSTRIES

ALUMINUM FIBERGLASS GATEARM REPLACEMENT BASES & SECTIONS

NO HARDWARE INCLUDED WITH BASES OR SECTIONS



16FT ALUMINUM BASE SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1561E-TD

8FT FIBERGLASS SECOND SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1562E-8D

16FT FIBERGLASS SECOND SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1562E-TD

16FT FIBERGLASS THIRD SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1563E-TD

16FT ALUMINUM BASE SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1561H-TD

8FT FIBERGLASS SECOND SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1562H-8TD

16FT FIBERGLASS SECOND SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1562H-TD

16FT FIBERGLASS THIRD SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1563H-TD

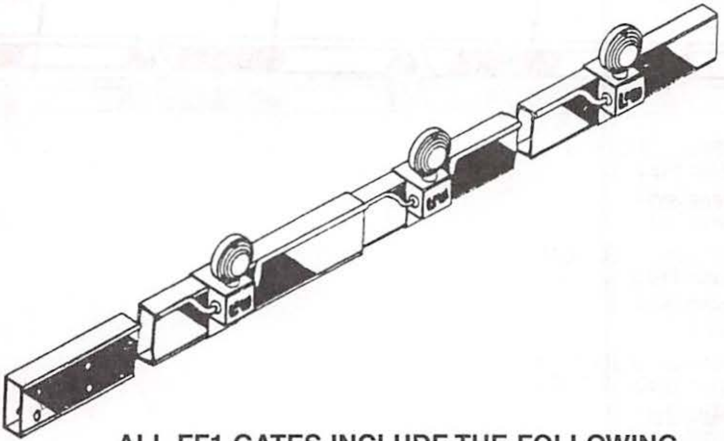
SEE PAGES 60 THRU 64 FOR REPLACEMENT GATELAMPS AND ADDITIONAL REPLACEMENT PARTS

L & W INDUSTRIES

GATEARMS
ALL FIBERGLASS GATES

FF1 FIBERGLASS GATES

NO DRILLING REQUIRED TO ADJUST GATE LENGTH OR MOUNT GATE LAMPS
EASY FOR ONE MAN TO INSTALL
ADJUSTABLE FROM 16FT TO 32 OR 16FT TO 46FT LONG
INTERCHANGEABLE WITH MANY OTHER MODELS OF ALUMINUM FIBERGLASS GATEARMS



ALL FF1 GATES INCLUDE THE FOLLOWING

****ENGINEERING OR HIGH INTENSITY GRADE REFLECTIVE TAPE****
**KIT OF 3EA 4" GATE LAMPS WITH CORD, WIRE TIES & ALUMINUM BOX
WITH STAINLESS STEEL ADJUSTABLE MOUNTING CLAMP (LW PART NO.P1017-28X-P3)****
****16FT FIBERGLASS BASE SECTION-ALL HOLES PREDRILLED****
****12" ALUMINUM SUPPORT SLEEVE FOR BASE SECTION****
16FT FIBERGLASS SECOND SECTION-ALL HOLES PREDRILLED**
16FT FIBERGLASS THIRD SECTION FOR 16FT TO 46FT-ALL HOLES PREDRILLED**
****ALL REQUIRED MOUNTING HARDWARE****

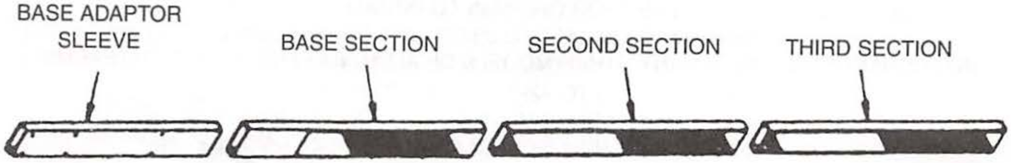
ORDERING REFERENCES

SIZE	DESCRIPTION	LW PART NO.
16FT-32FT	ENGINEERING GRADE TAPE W/ 4" LAMPS	6K1425E32T4
16FT-32FT	ENGINEERING GRADE TAPE NO LAMPS	6K1425E32T
16FT-32FT	HIGH INTENSITY GRADE TAPE W/4" LAMPS	6K1425H32T4
16FT-32FT	HIGH INTENSITY GRADE TAPE NO LAMPS	6K1425H32T
16FT-46FT	ENGINEERING GRADE TAPE W/4" LAMPS	6K1425E46T4
16FT-46FT	ENGINEERING GRADE TAPE NO LAMPS	6K1425E46T
16FT-46FT	HIGH INTENSITY GRADE TAPE W/ 4" LAMPS	6K1425H46T4
16FT-46FT	HIGH INTENSITY GRADE TAPE NO LAMPS	6K1425H46T

SEE NEXT PAGE FOR REPLACEMENT PARTS

FIBERGLASS GATEARM
REPLACEMENT BASES & SECTIONS

NO HARDWARE INCLUDED WITH BASES OR SECTIONS



16FT FIBERGLASS BASE SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1560E-SD

8FT FIBERGLASS SECOND SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1562E-8SD

16FT FIBERGLASS SECOND SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1562E-SD

16FT FIBERGLASS THIRD SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1563E-SD

16FT FIBERGLASS BASE SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1560H-SD

8FT FIBERGLASS SECOND SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1562H-8SD

6FT FIBERGLASS SECOND SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1562H-SD

6FT FIBERGLASS THIRD SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1563H-SD

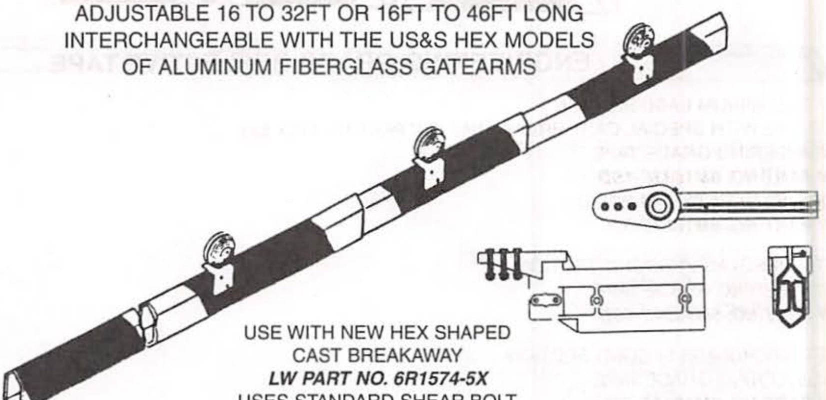
SEE PAGES 60 THRU 64 FOR REPLACEMENT GATELAMPS AND ADDITIONAL REPLACEMENT PARTS

L & W INDUSTRIES

HIGH WIND PROFILE GATEARMS
HEXAGON ALUMINUM FIBERGLASS

HG1 HEXAGON GATE ALUMINUM/FIBERGLASS

MAXIMUM GATE PROFILE IS 5 INCHES HIGH
WITH SPECIAL CAST BREAKAWAY THE HEX GATE CAN BE USED WITH
THE EXISTING CAST BREAKAWAY STYLE ADAPTERS (LW PART NO. 1574-5X)
OR IN THE STANDARD US&S DESIGN USING SHEAR PIN (LW PART NO. 6R1571-X)
NO DRILLING REQUIRED TO ADJUST GATE LENGTH OR MOUNT GATE LAMPS
EASY FOR ONE MAN TO INSTALL
ADJUSTABLE 16 TO 32FT OR 16FT TO 46FT LONG
INTERCHANGEABLE WITH THE US&S HEX MODELS
OF ALUMINUM FIBERGLASS GATEARMS



USE WITH NEW HEX SHAPED
CAST BREAKAWAY
LW PART NO. 6R1574-5X
USES STANDARD SHEAR BOLT
LW PART NO. 6R1570-X

ALL HEX GATES INCLUDE THE FOLLOWING

****ENGINEERING OR HIGH INTENSITY GRADE REFLECTIVE TAPE****
**KIT OF 3EA 4" GATE LAMPS WITH CORD, WIRE TIES & ALUMINUM BOX
WITH STAINLESS STEEL ADJUSTABLE MOUNTING CLAMP (LW PART NO.P1017-28X-P3)****
****16FT FIBERGLASS BASE SECTION-ALL HOLES PREDRILLED****
****ALUMINUM SUPPORT SLEEVE FOR BASE SECTION****
16FT FIBERGLASS SECOND SECTION-ALL HOLES PREDRILLED**
16FT FIBERGLASS THIRD SECTION FOR 16FT TO 46FT-ALL HOLES PREDRILLED**
****ALL REQUIRED MOUNTING HARDWARE****

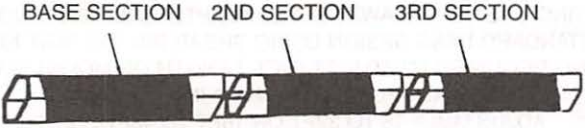
ORDERING REFERENCES

SIZE	**DESCRIPTION**	**LW PART NO.** (SHEAR PIN APPLICATION)	**LW PART NO** (CAST BREAKAWAY APPLICATION)
16FT-32FT	ENGINEERING GRADE TAPE W/4" LAMPS	6K1440E32T4	6K1442E32T4
16FT-32FT	ENGINEERING GRADE TAPE NO LAMPS	6K1440E32T	6K1442E32T
16FT-32FT	HIGH INTENSITY GRADE TAPE WITH 4" LAMPS	6K1440H32T4	6K1442H32T4
16FT-32FT	HIGH INTENSITY GRADE TAPE NO LAMPS	6K1440H32T	6K1442H32T
16FT-46FT	ENGINEERING GRADE TAPE WITH 4" LAMPS	6K1440E46T4	6K1442E46T4
16FT-46FT	ENGINEERING GRADE TAPE NO LAMPS	6K1440E46T	6K1442E46T
16FT-46FT	HIGH INTENSITY GRADE TAPE WITH 4" LAMPS	6K1440H46T4	6K1442H46T4
16FT-46FT	HIGH INTENSITY GRADE TAPE NO LAMPS	6K1440H46T	6K1442H46T

SEE NEXT PAGE FOR REPLACEMENT BASES & SECTIONS AND PAGE 66 FOR INFORMATION ON SPECIAL HEX CAST BREAKAWAY

HIGH WIND PROFILE HEX ALUMINUM FIBERGLASS REPLACEMENT BASES & SECTIONS

NO HARDWARE INCLUDED WITH BASES OR SECTIONS



ENGINEERING GRADE REFLECTIVE TAPE

16FT ALUMINUM BASE SECTION
FOR USE WITH SPECIAL CAST BREAKAWAY (LW PART NO 1754-5X)
ENGINEERING GRADE TAPE
LW PART NO. 6M1633E-1SD
FOR USE WITH SHEAR PIN
LW PART NO. 6M1633E-SD

8FT FIBERGLASS SECOND SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1634E-8SD

16FT FIBERGLASS SECOND SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1634E-SD

16FT FIBERGLASS THIRD SECTION
ENGINEERING GRADE TAPE
LW PART NO. 6M1638E-SD

HIGH INTENSITY REFLECTIVE TAPE

16FT FIBERGLASS BASE SECTION
FOR USE WITH STANDARD SHEAR PIN APPLICATION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1633H-1SD
FOR USE WITH SHEAR PIN
LW PART NO. 6M1633H-SD

8FT FIBERGLASS SECOND SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1634H-8SD

16FT FIBERGLASS SECOND SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1634H-SD

16FT FIBERGLASS THIRD SECTION
HIGH INTENSITY GRADE TAPE
LW PART NO. 6M1638H-SD

SEE PAGES 60 THRU 64 FOR REPLACEMENT GATELAMPS AND ADDITIONAL REPLACEMENT PARTS

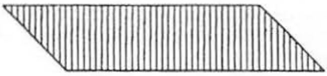
GATEARM REPLACEMENT PARTS

GATE STRIPING REFLECTIVE TAPE

ENGINEERING GRADE REFLECTIVE TAPE

ENGINEERING GRADE TAPE (ROLLS)
4" X 150 FT ROLL
RED
LW PART NO. 6U1140RS
WHITE
LW PART NO. 6U1141RS

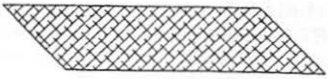
ENGINEERING GRADE TAPE (STRIPES)
4" X 16" STRIPE
RED FIELD SIDE
LW PART NO. 6U1099EF
RED TRACK SIDE
LW PART NO. 6U1099ET
WHITE FIELD SIDE
LW PART NO. 6U1098EF
WHITE TRACK SIDE
LW PART NO. 6U1098ET



HIGH INTENSITY REFLECTIVE TAPE

HI INTENSITY GRADE TAPE (ROLLS)
4" X 150 FT ROLL
RED
LW PART NO. 6U1142HS
WHITE
LW PART NO. 6U1143HS

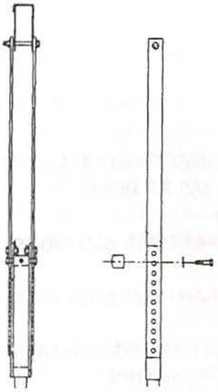
HI INTENSITY GRADE TAPE (STRIPES)
4" X 16" STRIPE
RED FIELD SIDE
LW PART NO. 6U1099HF
RED TRACK SIDE
LW PART NO. 6U1099HT
WHITE FIELD SIDE
LW PART NO. 6U1098HF
WHITE TRACK SIDE
LW PART NO. 6U1098HT



L & W INDUSTRIES

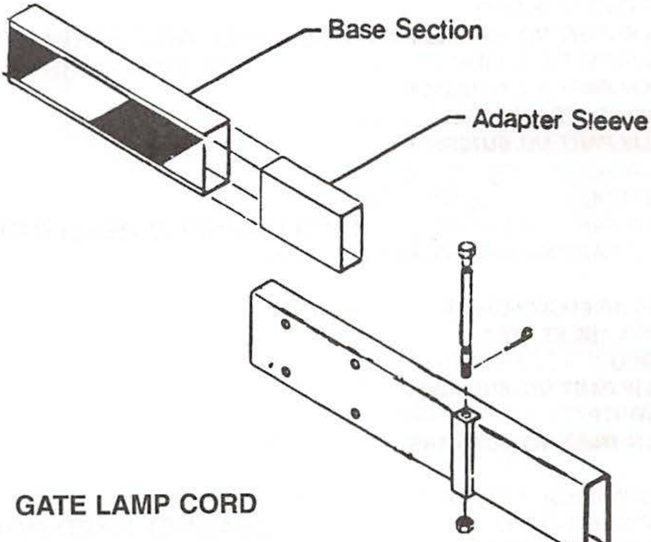
GATEARM REPLACEMENT PARTS

BUFFER LEG



BUFFER LEG
FOR ALUMINUM/FIBERGLASS
& FIBERGLASS GATEARMS
ALUMINUM CONSTRUCTION
LW PART NO. 6U1615-X

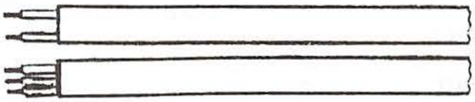
ADAPTOR SLEEVE



ADAPTOR SLEEVE
ALUMINUM
FOR RECT GATE BASE
12” LONG
LW PART NO. 6U1564
3FT LONG
LW PART NO. 6U1564-3
4FT LONG
LW PART NO. 6U1564-4
8FT LONG
LW PART NO. 6U1564-8

ADAPTOR SLEEVE
ALUMINUM
FOR MOUNTING RECT
GATE TO WESTERN CULLLEN
OR US&S CONV BRACKET
LW PART NO. 6U1576-X

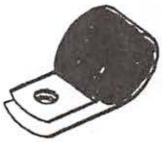
GATE LAMP CORD



CORD 2C#16 SJO
LW PART NO. DA6640

CORD 3#16 SJO
LW PART NO. DA6641

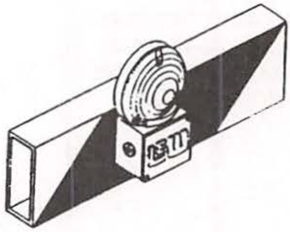
CORD CLAMP



CLAMP CORD
STAINLESS
INSULATED LOOP
LESS SCREW
LW PART NO. CA1775

4" DIAMETER GATEARM LAMPS

FIXED MOUNT

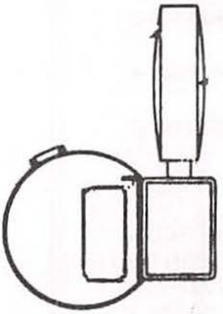


4" DIA FIXED MOUNT
CAST ALUMINUM BOX
GROMMET CABLE ENTRANCES
ALL MOUNTING HARDWARE
LW PART NO. 6P1017-X
LW PART NO. 6P1017-X-P3 (Kit of 3)

4" DIA FIXED MOUNT
POLY BOX
WITH GROMMET CABLE ENTRANCES
ALL MOUNTING HARDWARE
LW PART NO. 6P1013-X
LW PART NO. 6P1013-X-P3 (Kit of 3)

STAINLESS STEEL ADJUSTABLE STRAP MOUNT

EAST TO INSTALL - NO DRILLING REQUIRED TO MOUNT GATE LAMPS

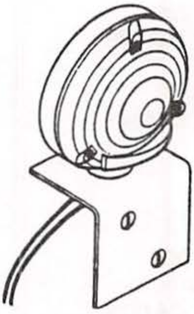


4" DIA STAINLESS STEEL STRAP MOUNT
CAST ALUMINUM BOX
GROMMET CABLE ENTRANCES
STAINLESS STEEL ADJ MTG STRAP
LW PART NO. 6P1017-28X
LW PART NO. 6P1017-28X-P3 (Kit of 3)

4" DIA FIXED MOUNT
POLY BOX
GROMMET CABLE ENTRANCES
STAINLESS STEEL ADJ MTG STRAP
LW PART NO. 6P1013-28X
LW PART NO. 6P1013-28X-P3 (Kit of 3)

"L" BRACKET FIXED MOUNT

ECONOMICAL

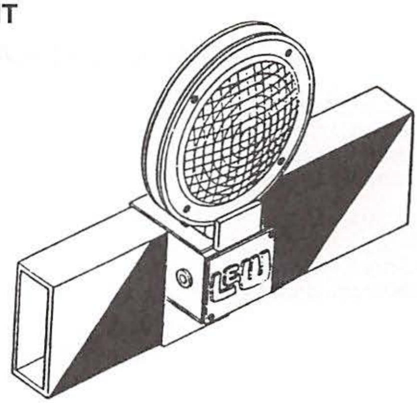


4" DIA FIXED MOUNT-ALUMINUM "L" BRACKET
WITH WIRE NUTS & MOUNTING HARDWARE
LW PART NO. 6P1035-X
LW PART NO. 6P1035-P3 (Kit of three)

7" DIAMETER GATEARM LAMPS

FIXED MOUNT

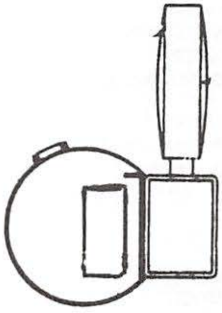
7" DIA FIXED MOUNT
CAST ALUMINUM BOX
GROMMET CABLE ENTRANCES
ALL MOUNTING HARDWARE
LW PART NO. 6P1024-X
LW PART NO. 6P1024-X-P3 (Kit of 3)



STAINLESS STEEL ADJUSTABLE STRAP MOUNT

EAST TO INSTALL - NO DRILLING REQUIRED TO MOUNT GATE LAMPS

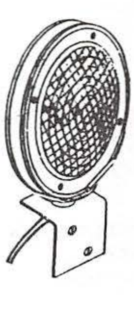
7" DIA FIXED MOUNT
CAST ALUMINUM BOX
GROMMET CABLE ENTRANCES
STAINLESS STEEL ADJ MTG STRAP
LW PART NO. 6P1024-28X
LW PART NO. 6P1024-28X-P3 (Kit of three)



"L" BRACKET FIXED MOUNT

ECONOMICAL

7" DIA FIXED MOUNT
ALUMINUM "L" BRACKET
WITH WIRE NUTS &
MOUNTING HARDWARE
LW PART NO. 6P1036-X
LW PART NO. 6P1036-X-P3 (Kit of three)



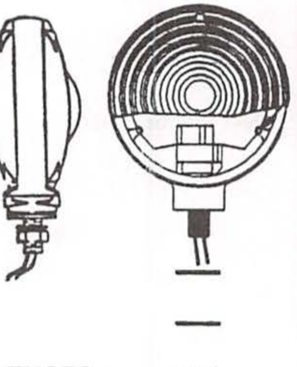
L & W INDUSTRIES

4” & 7 DIAMETER GATEARM LAMPS REPLACEMENT PARTS

COMPLETE REPLACEMENT LAMP ONLY-NO BOX

4" DIA LAMP COMPLETE-LESS BOX
WITH RING, SOCKET, WIRE, LENSES
MOUNTING HARDWARE
LW PART NO. 6P1019-X

7" DIA LAMP COMPLETE-LESS BOX
WITH RING, SOCKET, WIRE, LENSES
MOUNTING HARDWARE
LW PART NO. 6P1003-X

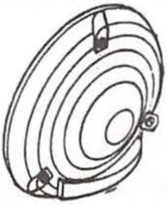


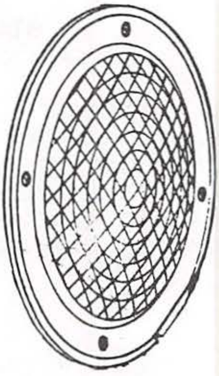
REPLACEMENT LENSES

4" DIA LAMP LENS
NO MOUNTING HARDWARE
LW PART NO. 7B1018

4" DIA LAMP LENS
W/GASKET & SCREWS
KIT OF 2 LENSES
LW PART NO. 7B1026C-X

7" DIA LAMP LENSES
NO MOUNTING HARDWARE
LW PART NO. 7B1002





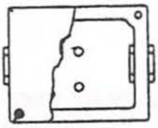
REPLACEMENT BOXES

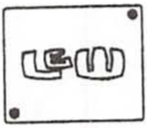
CAST ALUMINUM BOX
FOR FIXED MOUNT
WITH HARDWARE
LW PART NO. 6P1004-7X

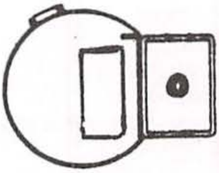
POLY BOX
FOR FIXED MOUNT
WITH HARDWARE
LW PART NO. 6P1013-5X

CAST ALUMINUM BOX
FOR STAINLESS CLAMP MOUNT
WITH HARDWARE
LW PART NO. 6P1004-10X

POLY BOX
FOR STAINLESS CLAMP MOUNT
WITH HARDWARE
LW PART NO. 6P1013-6X



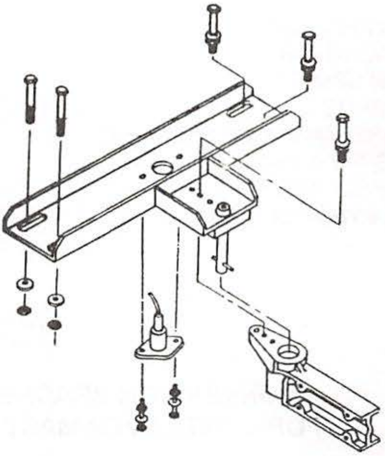




GATEARM CONVERSION
MOUNTING BRACKETS & BREAKAWAYS

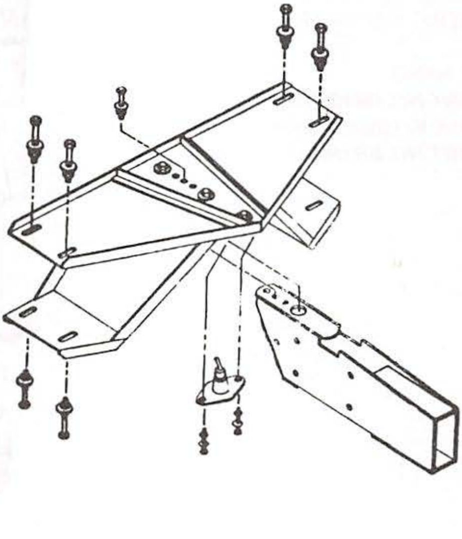
CONVERSION BRACKET & CAST BREAKAWAY

CONVERSION BRACKET
MOUNTS ON WESTERN,
SAFETRAN OR US&S
MECHANISM ARMS
WITH CAST BREAKAWAY (LW 6R1574-X)
SHEAR BOLTS (LW 6R1570-X)
MOUNTING HARDWARE KIT
LW PART NO. 6R1621-X



CONVERSION BRACKET & FABRICATED BREAKAWAY

CONVERSION BRACKET
MOUNTS ON WESTERN
SAFETRAN OR US&S
MECHANISM ARMS
WITH FABRICATED
BREAKAWAY (LW 6R1573-X)
SHEAR BOLTS (LW 6R1570-X)
MOUNTING HARDWARE KIT
LW PART NO. 6R1620-X

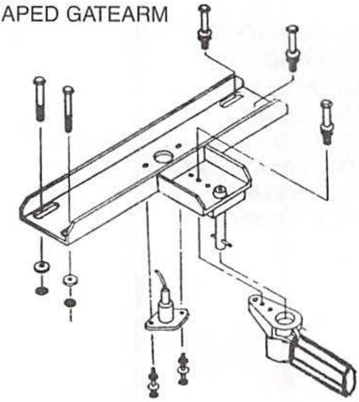


L & W INDUSTRIES

GATEARM CONVERSION MOUNTING BRACKETS & BREAKAWAYS

CONVERSION BRACKET & HEXAGON CAST BREAKAWAY

FOR HIGH WIND HEXAGON SHAPED GATEARM

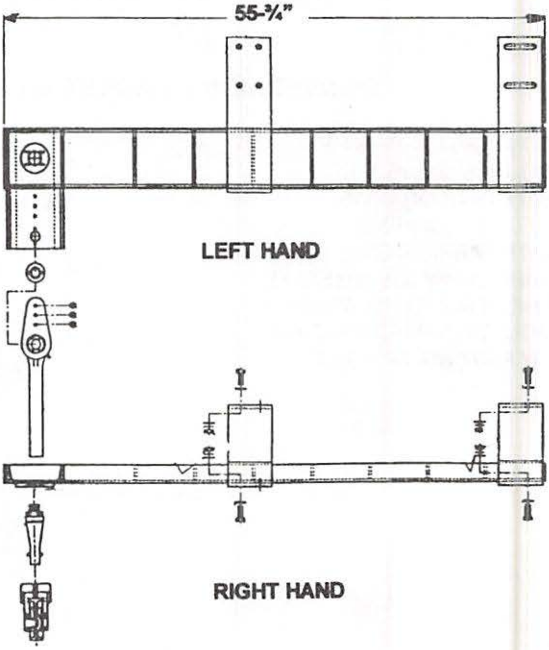


CONVERSION BRACKET
MOUNTS ON WESTERN
SAFETRAN OR US&S
MECHANISM ARMS
WITH CAST BREAKAWAY (LW 6R1574-5X)
SHEAR BOLTS (LW 6R1570-X)
MOUNTING HARDWARE KIT
LW PART NO. 6R1621-5X

CONVERSION BRACKET & CAST BREAKAWAY FOR CANTILEVER MAST MOUNTED MECHANISMS

CONVERSION BRACKET
FOR MAST MOUNTED MECH
36" OFFSET
GALVANIZED STEEL
WITH CAST BREAKAWAY (6R1574-X)
MOUNTING HARDWARE

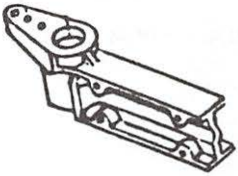
RIGHT HAND
LW PART NO. 6R1590-XR
LEFT HAND (shown below)
LW PART NO. 6R1590-XL



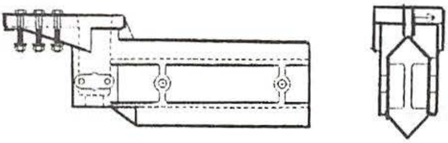
REPLACEMENT GATEARM BREAKAWAY, SHEAR BOLTS & MISC PARTS

CAST & FABRICATED GATEARM BREAKAWAYS

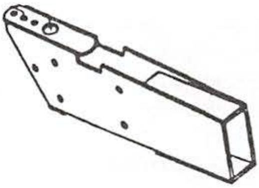
CAST BREAKAWAY
WITH 3 SHEAR BOLTS
MOUNTING HARDWARE
LW PART NO. 6R1574-X



CAST BREAKAWAY HEXAGON SHAPE
WITH 3 SHEAR BOLTS
MOUNTING HARDWARE
LW PART NO. 6R1574-5X

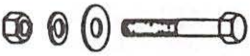


FABRICATED BREAKAWAY
WITH 3 SHEAR BOLTS
MOUNTING HARDWARE
LW PART NO. 6R 1573-X



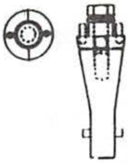
SHEAR BOLTS

SHEAR BOLT BRASS
5/16" DIA X 2" LONG
WITH NUTS & LOCKWASHERS
LW PART NO. 6R1570-X (1" THREAD)
LW PART NO. 6R1570-1X (1-1/2" THREAD)



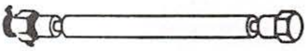
TAPER PIN (PIVOT PIN)

TAPER PIN (PIVOT PIN)
FOR CAST BREAKAWAY
WITH HARDWARE
LW PART NO. 6R1551-X



SHEAR PINS

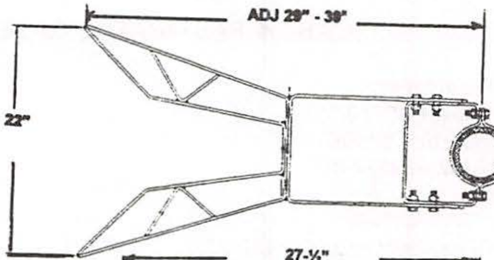
SHEAR PIN DEEP GROOVE
W/NUT & COTTER PIN
3/8" X 6-1/2" LONG
FOR LW HEX GATES, US&S AND WC GATES
LW PART NO. 6R1571-X-DEEP GROOVE
LW PART NO. 6R1572-X-SHALLOW GROOVE



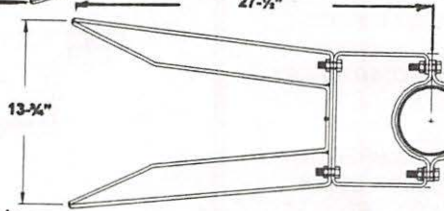
HIGH WIND GUARDS
4" OR 5" MAST MOUNT

WIND GUARDS FOR 4" MAST

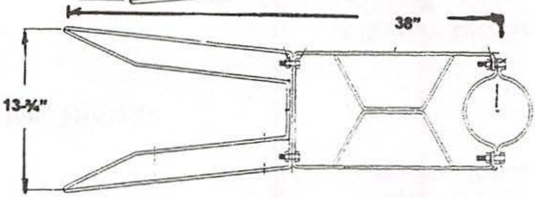
WIND GUARD ALUMINUM
ADJUSTABLE FOR 4" MAST
22" WIDE OPENING
SS HDW
LW PART NO. 6U5565-6X



WIND GUARD ALUMINUM
FIXED FOR 4" MAST
14" WIDE OPENING
SS HDW
LW PART NO. 6U5565-X

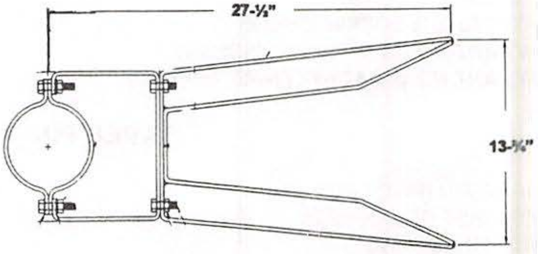


WIND GUARD ALUMINUM
FIXED FOR 4" MAST
EM PEDESTAL GATE
14" WIDE OPENING
SS HDW
LW PART NO. 6U5570-X



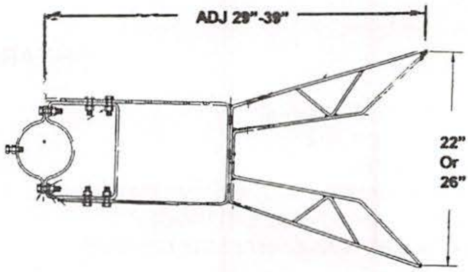
WIND GUARDS FOR 5" MAST

WIND GUARD ALUMINUM
FIXED FOR 5" MAST
14" WIDE OPENING
SS HDW
LW PART NO. 6U5565-1X



WIND GUARD ALUMINUM
ADJ FOR 5" MAST
22" WIDE OPENING
SS HDW
LW PART NO. 6U5565-2X

WIND GUARD ALUMINUM
ADJ FOR 5" MAST
26" WIDE OPENING
SS HDW
LW PART NO. 6U5565-4X



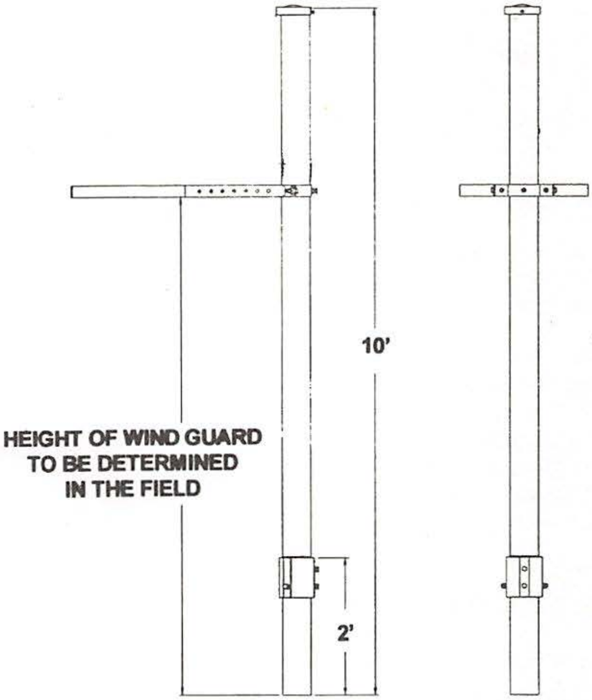
HIGH WIND GUARDS
5" STUB MAST & CANTILEVER EXTENSIONS

STUB MAST EXTENSIONS

STUB MAST EXTENSION ONLY
10FT LONG
ADDS 8FT TO 5" STUB MAST
PINNACLE
NO WIND GUARD
LW PART NO. 6U5549

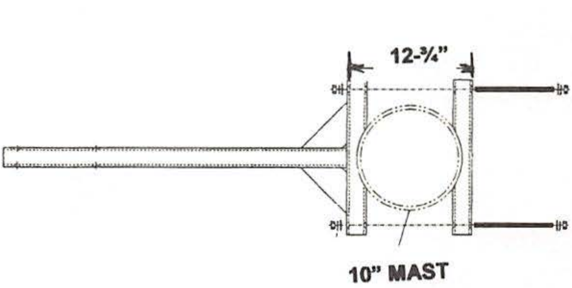
STUB MAST EXTENSION (6U5549)
WITH 6U5565-1X WIND GUARD
PINNACLE
LW PART NO. 6U5549-X

STUB MAST EXTENSION (6U5549)
WITH 6U5565-6X WIND GUARD
PINNACLE
LW PART NO. 6U5549-1X


10'
HEIGHT OF WIND GUARD
TO BE DETERMINED
IN THE FIELD
2'

CANTILEVER WIND GUARD EXTENSION

HIGH WIND GUARD EXTENSION
FOR 10" DIA MAST
LW PART NO. 6U7162-X



NOTE PAGE

INSTRUMENT HOUSES-CASES

HOUSES-ALUMINUM,CORTEN,STEEL

CASES-ALUMINUM,CORTEN, STEEL

SIGNAL HOUSES - TOP LOADED

POLE MOUNT CASES

EQUIPMENT RACKS

BATTERY RACKS & TRAYS

POWER OFF LIGHTS

HOUSES ARE AVAILABLE WITH DROP DOWN OR STANDARD FOUNDATIONS.

ALL STEEL HOUSES ARE POWDER COATED

INSTRUMENT HOUSES & CASES

L&W SIGNAL HOUSES & CASES MEET OR EXCEED THE STANDARD RAIL INDUSTRY STRUCTURAL SPECIFICATIONS FOR

FLOOR & ROOF LOADING

WIND LOADING

AIR EXCHANGE

L & W HOUSES ARE AVAILABLE IN THE FOLLOWING SIZES

3X4, 4X6 , 6X6, 6X8, 8X8 TO 8X30
10X10 TO 10X30
SPECIAL SIZE HOUSES ARE AVAILABLE

L&W CASES ARE AVAILABLE IN THE FOLLOWING SIZES

41" HIGH & LOW, 60" HIGH & LOW, 80" HIGH & LOW
SPECIAL SIZE CASES ARE AVAILABLE

L&W INSTRUMENT HOUSES & CASES CAN BE CONSTRUCTED OF .100 ALUMINUM, 12GA GALVANEALED STEEL OR CORTEN STEEL.

ALL GALVANEALED STEEL HOUSES & CASES ARE FINISHED WITH A 3 TO 4 MIL POWDER COATED PAINT FINISH.

L&W SIGNAL HOUSES & CASES ARE FULLY WELDED STRUCTURES CONSTRUCTED WITH AN ANGLE IRON FRAME.

FLOORS AND WALL PANELS ARE WELDED TO THE ANGLE FRAME EVERY 6 INCHES TO CREATE A SOLID INTEGRATED STRUCTURE.

ROOF PANELS ARE OVERLAPPED TO MAXIMIZE MOISTURE PROTECTION.

ALL WALL PANELS AND ROOF PANELS SEAMS ARE FULLY SILICONED.

DOORS ARE TWO PANEL CONSTRUCTION AND VENTED.

HOUSES ARE AVAILABLE FOR STANDARD FOUNDATION MOUNT
OR
CAN BE PROVIDED WITH DROP DOWN STYLE FOUNDATIONS.

ALL L&W SIGNAL HOUSES & CASES ARE SERIALIZED BEFORE SHIPMENT FOR QUALITY CONTROL.

PLEASE SEE FOLLOWING PAGES FOR OPTIONS AND ADDITIONAL STANDARD FEATURES

INSTRUMENT HOUSES

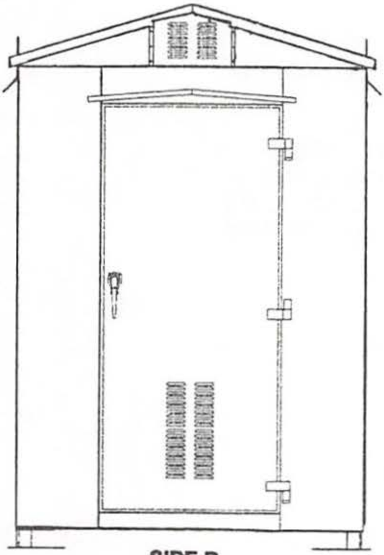
STANDARD FEATURES

INTERNAL ESCAPE DOOR LATCH
INTERNAL DOOR LOCK
POINT DOOR LATCHING
PADLOCKABLE DOORS
FULLY GASKETED DOORS
SCREENED DOOR VENTS
GREASABLE DOOR HINGES
RAIN SHIELD OVER DOORS
TWO PANEL DOOR CONSTRUCTION
LIFTING EYES
PLYWOOD FLOORING
KEYWAYS
WIREWAYS
UG CABLE KNOCKOUTS
AERIAL CABLE KNOCKOUTS
FLUORESCENT LIGHTS
PYRAMID FLOOR MATT

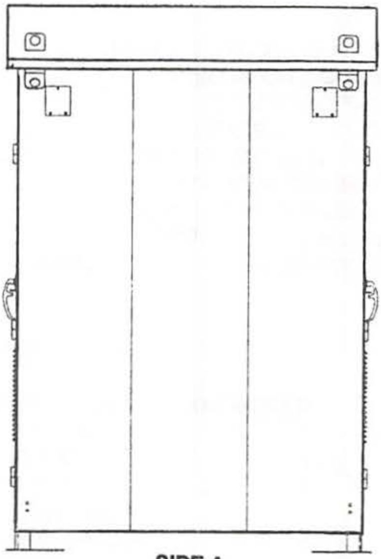
OPTIONAL FEATURES

OPTION NO	DESCRIPTION
1	HEATER
2	AIR CONDITIONER
3	VENT FAN & THERMOSTAT
4	100 AMP SERVICE
5	DUPLEX OUTLETS
6	GFI OUTLETS
7	INCANDESCENT LAMPS
8	FLUORESCENT LAMPS
9	FIXED RELAY RACKS
10	SWING RELAY RACKS
11	COMMUNICATION RACKS
12	TERMINAL BOARDS
13	WALL MOUNTING BOARDS
14	SHELVES
15	2" INSULATION
16	WOOD BATTERY TRAY
17	POLY BATTERY TRAY
18	TWO TIER BATTERY TRAY
19	CABLE RISERS & BUSHINGS
20	AERIAL VENT KITS
21	POWER OFF LIGHT
22	TEST KEY
23	SURGE PROTECTION
24	INTERNAL & EXTERNAL WELDED GROUNDS
25	INTERNAL & EXTERNAL GROUNDING PKGS
26	RELAY BARS & WIRE TIES

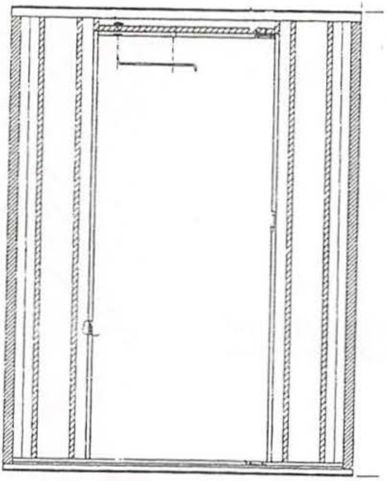
TYPICAL 6X6 HOUSE LAYOUT

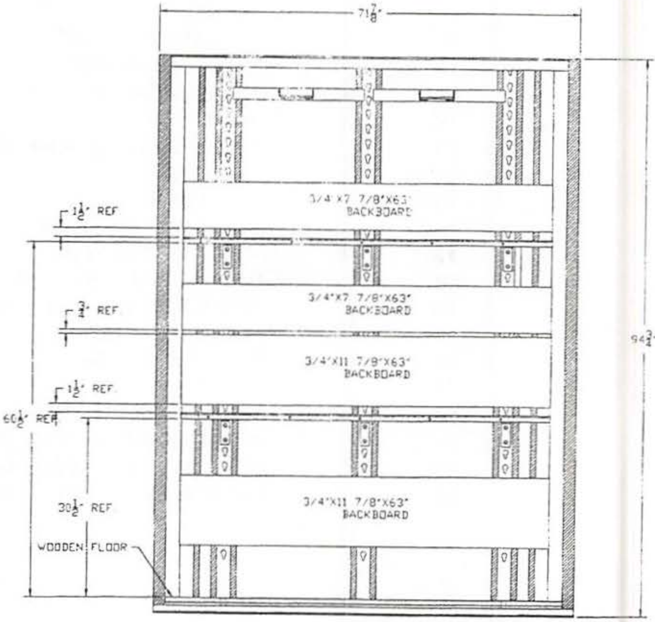


SIDE B

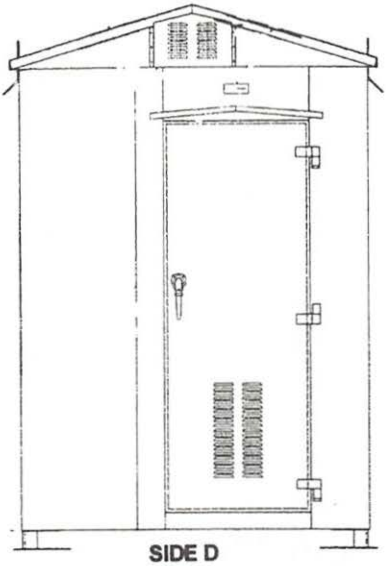


SIDE A

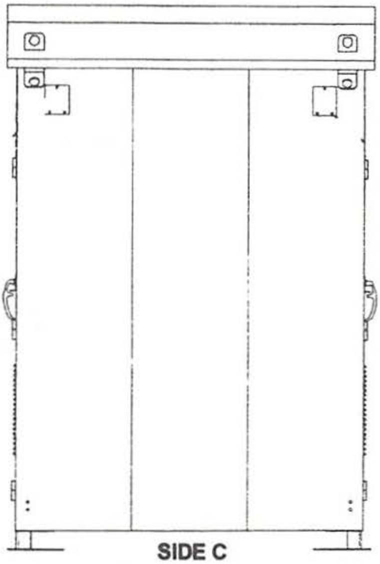



71 7/8"
3/4"X7 7/8"X63"
BACKBOARD
1 1/2" REF
3/4"X7 7/8"X63"
BACKBOARD
3/4" REF
3/4"X11 7/8"X63"
BACKBOARD
1 1/2" REF
60 1/2" REF
3/4"X11 7/8"X63"
BACKBOARD
30 1/2" REF
WOODEN FLOOR
94 3/4"

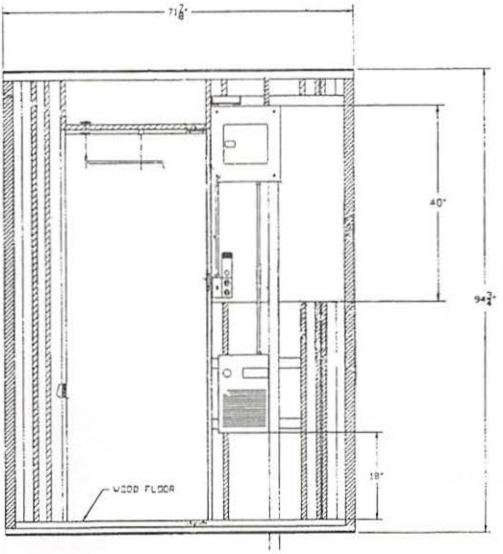
TYPICAL 6X6 HOUSE LAYOUT

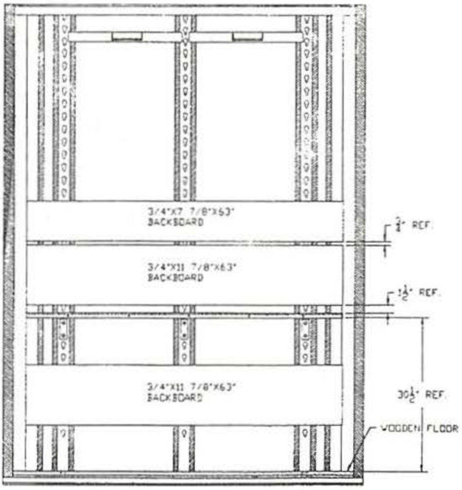


SIDE D

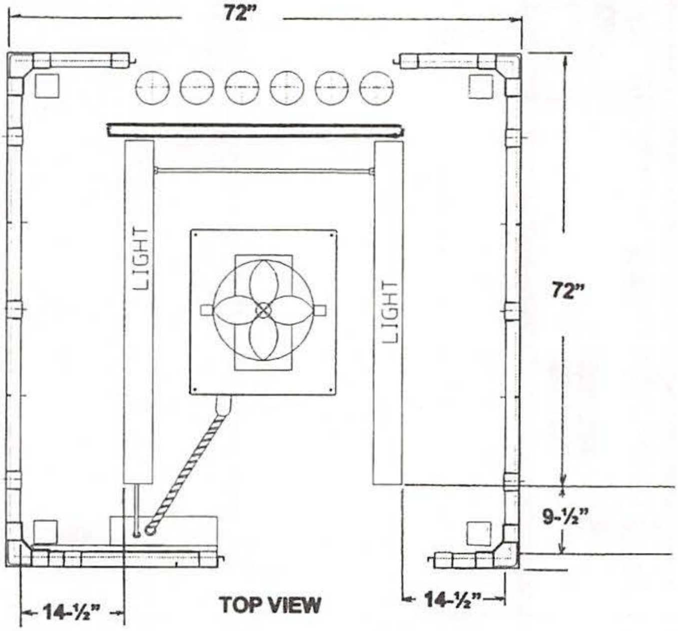


SIDE C

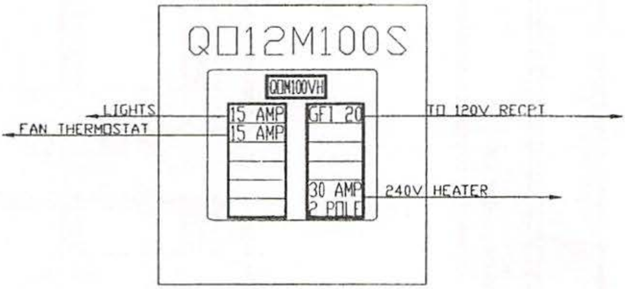

71 7/8"
40"
94 3/4"
18"
WOOD FLOOR


3/4"X7 7/8"X63" BACKBOARD
3/4"X11 7/8"X63" BACKBOARD
3/4"X11 7/8"X63" BACKBOARD
3/4" REF.
1 1/2" REF.
30 1/2" REF.
WOODEN FLOOR

TYPICAL 6X6 HOUSE LAYOUT


72"
LIGHT
LIGHT
72"
9-½"
14-½"
14-½"

TOP VIEW


QO12M100S
QOM100VH
LIGHTS
FAN THERMOSTAT
15 AMP
15 AMP
GFI 20
TO 120V RECPT
30 AMP
2 POLE
240V HEATER

LOAD CENTER

L & W INDUSTRIES

INSTRUMENT CASES

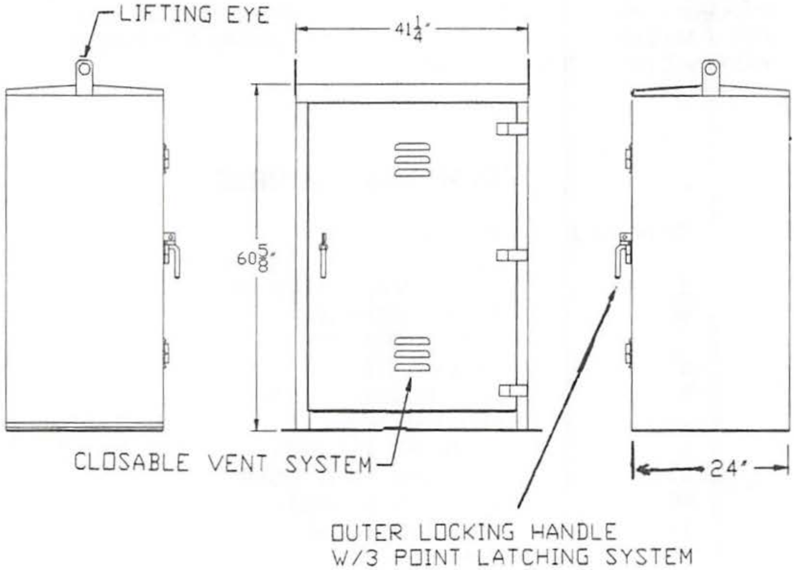
STANDARD FEATURES

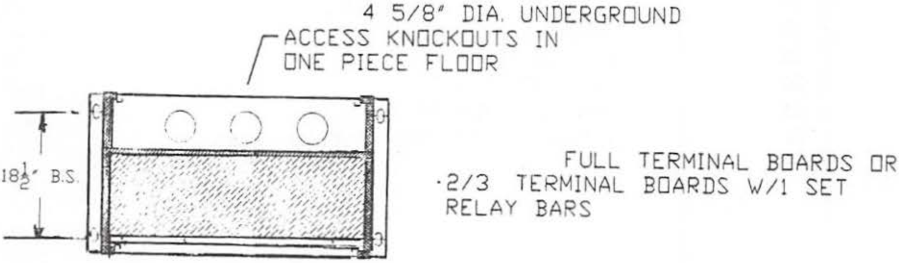
THREE POINT DOOR LATCHING
PADLOCKABLE DOORS
FULLY GASKETED DOORS
SCREENED DOOR VENTS
GREASABLE DOOR HINGES
DOOR RAIN SHIELD
TWO PANEL DOOR CONSTRUCTION
LIFTING EYES
PLYWOOD FLOOR
UG CABLE KNOCKOUTS
AERIAL CABLE KNOCKOUTS
INCANDESCENT LAMP
PYRAMID FLOOR MATT

OPTIONAL FEATURES

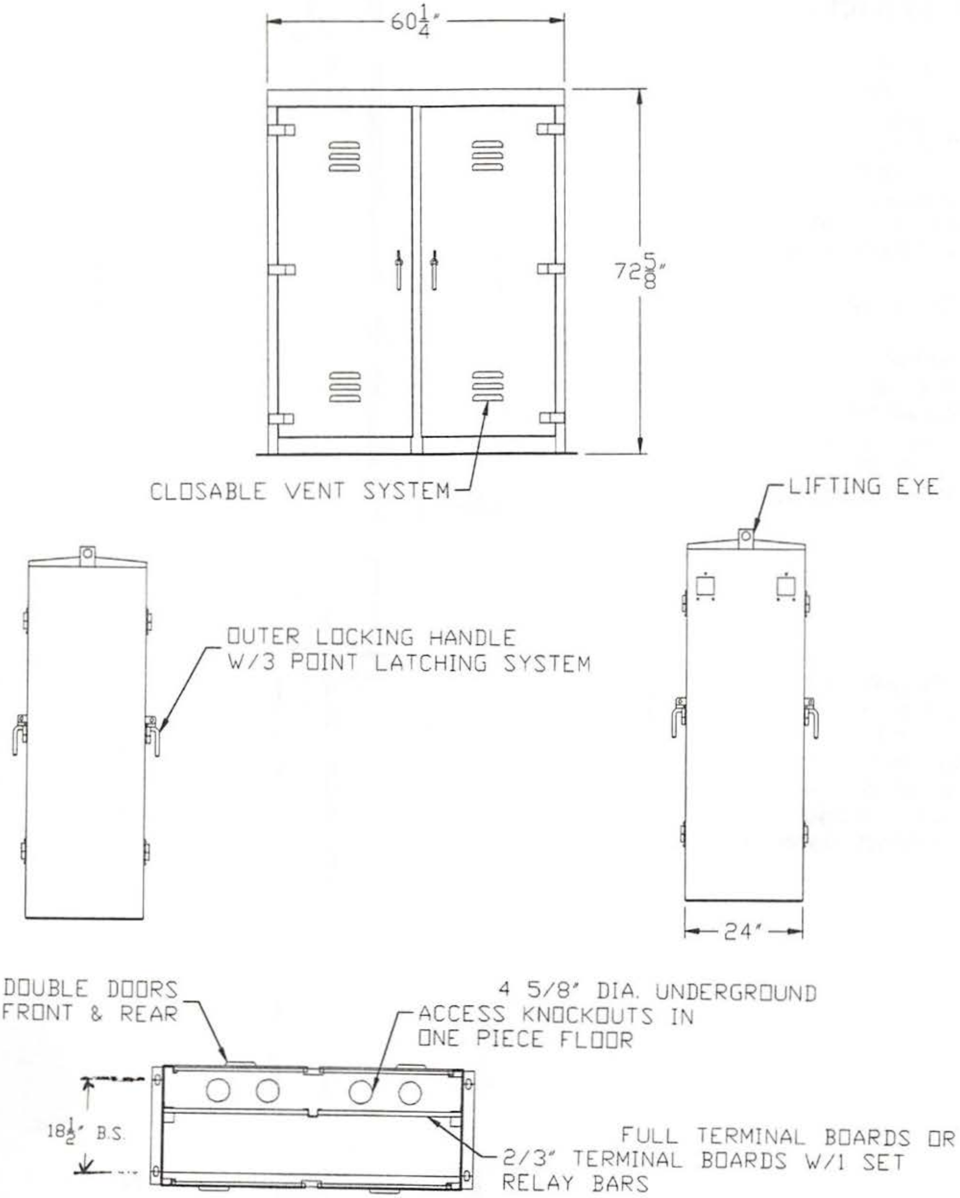
OPTION NO	DESCRIPTION
1	HEATER
2	VENT FAN & THERMOSTAT
3	100 AMP SERVICE
4	DUPLEX OUTLETS
5	GFI OUTLETS
6	FLUORESCENT LAMPS
7	FIXED RELAY RACKS
8	SWING RELAY RACKS
9	COMMUNICATION RACKS
10	FULL BACK BOARDS
11	HALF BACK BOARD
12	SHELVES
13	RELAY BARS & TIES WIRES
14	2" INSULATION
15	WOOD BATTERY TRAY
16	POLY BATTERY TRAY
17	CABLE RISERS & BUSHINGS
18	AERIAL VENT KITS
19	POWER OFF LIGHT
20	TEST KEY
21	SURGE PROTECTION
22	INTERNAL & EXTERNAL WELDED GROUNDS

TYPICAL LOW SINGLE DOOR CASE LAYOUT


LIFTING EYE
41¼"
60⅝"
CLOSABLE VENT SYSTEM
24"
OUTER LOCKING HANDLE
W/3 POINT LATCHING SYSTEM


4 5/8" DIA. UNDERGROUND
ACCESS KNOCKOUTS IN
ONE PIECE FLOOR
18½" B.S.
FULL TERMINAL BOARDS OR
2/3 TERMINAL BOARDS W/1 SET
RELAY BARS

TYPICAL HIGH DOUBLE DOOR CASE LAYOUT

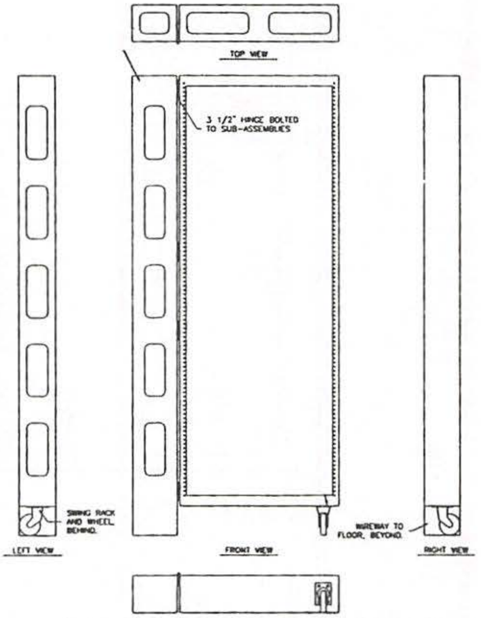

60 1/4"
72 5/8"
CLOSABLE VENT SYSTEM
LIFTING EYE
OUTER LOCKING HANDLE
W/3 POINT LATCHING SYSTEM
24"
DOUBLE DOORS
FRONT & REAR
4 5/8" DIA. UNDERGROUND
ACCESS KNOCKOUTS IN
ONE PIECE FLOOR
18 1/2" B.S.
FULL TERMINAL BOARDS OR
2/3" TERMINAL BOARDS W/1 SET
RELAY BARS

RELAY RACKS
SINGLE & DOUBLE SWING

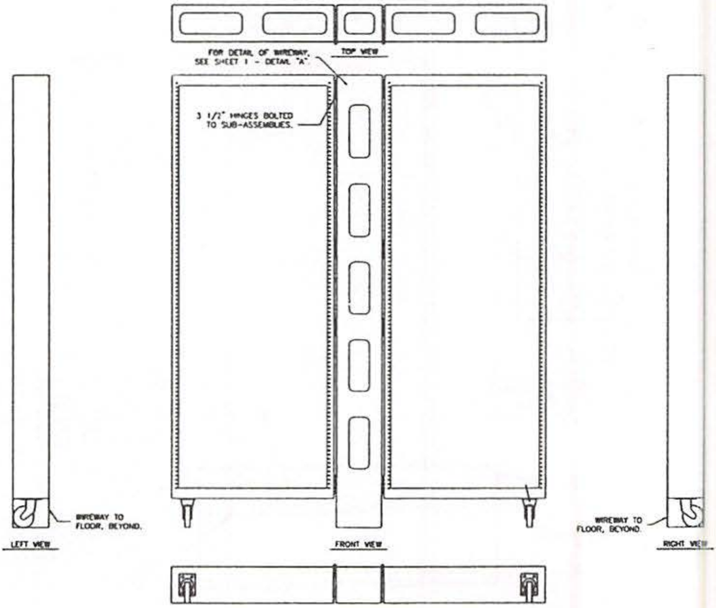
SWING RACKS

SINGLE SWING
RELAY RACK
LEFT HAND
31" W X 7" D
GUIDE WHEEL
WITH 90DEG STOP
NO BARS OR WIRE TIES
LW PART NO. 2A570001-X

SINGLE SWING
RELAY RACK
RIGHT HAND
31" W X 7" D
GUIDE WHEEL
WITH 90DEG STOP
NO BARS OR WIRE TIES
LW PART NO. 2A570001-1X


TOP VIEW
3 1/2" HINGE BOLTED TO SUB-ASSEMBLIES
SWING RACK AND WHEEL BEHIND.
WIREWAY TO FLOOR, BEYOND.
LEFT VIEW
FRONT VIEW
RIGHT VIEW

DOUBLE SWING
RELAY RACK
31" W X 7" D
GUIDE WHEEL
WITH 90DEG STOP
NO BARS OR WIRE TIES
LW PART NO. 2A57000-X

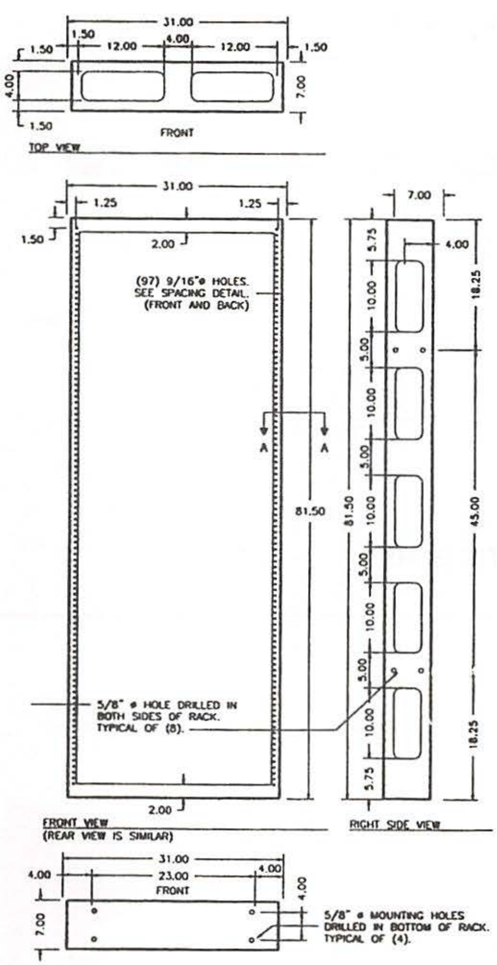

TOP VIEW
FOR DETAIL OF WIREWAY, SEE SHEET 1 - DETAIL "A".
3 1/2" HINGES BOLTED TO SUB-ASSEMBLIES.
WIREWAY TO FLOOR, BEYOND.
WIREWAY TO FLOOR, BEYOND.
LEFT VIEW
FRONT VIEW
RIGHT VIEW

L & W INDUSTRIES

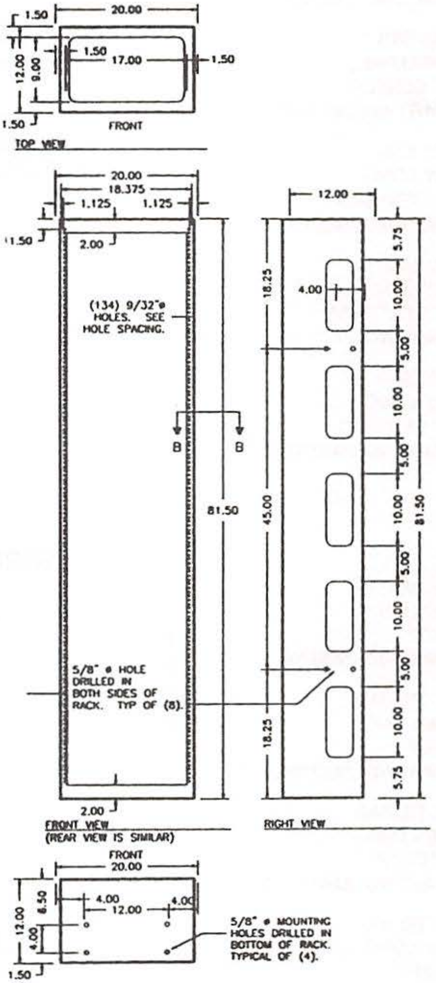
RELAY RACKS
FIXED

FIXED RELAY RACK
31" W X 7" D
NO BARS OR WIRE TIES
LW PART NO. 2A570002-X

FIXED TWC RACK
20" W X 12" D
NO BARS OR WIRE TIES
LW PART NO. 2A570001-1X



31.00
1.50
12.00
4.00
12.00
1.50
1.50
4.00
7.00
1.50
FRONT
TOP VIEW
31.00
1.25
1.25
1.50
2.00
(97) 9/16"ø HOLES. SEE SPACING DETAIL. (FRONT AND BACK)
A
A
81.50
5/8" ø HOLE DRILLED IN BOTH SIDES OF RACK. TYPICAL OF (8).
2.00
FRONT VIEW
(REAR VIEW IS SIMILAR)
7.00
4.00
5.75
10.00
5.00
10.00
5.00
10.00
5.00
10.00
5.00
10.00
5.75
81.50
18.25
45.00
18.25
RIGHT SIDE VIEW
31.00
23.00
4.00
4.00
FRONT
4.00
7.00
5/8" ø MOUNTING HOLES DRILLED IN BOTTOM OF RACK. TYPICAL OF (4).



1.50
20.00
1.50
17.00
1.50
12.00
9.00
1.50
FRONT
TOP VIEW
20.00
18.375
1.125
1.125
1.50
2.00
(134) 9/32"ø HOLES. SEE HOLE SPACING.
B
B
81.50
5/8" ø HOLE DRILLED IN BOTH SIDES OF RACK. TYP OF (8).
2.00
FRONT VIEW
(REAR VIEW IS SIMILAR)
12.00
4.00
18.25
45.00
18.25
5.75
10.00
5.00
10.00
5.00
10.00
5.00
10.00
5.00
10.00
5.75
81.50
RIGHT VIEW
FRONT
20.00
4.00
12.00
4.00
12.00
8.50
4.00
1.50
5/8" ø MOUNTING HOLES DRILLED IN BOTTOM OF RACK. TYPICAL OF (4).

RELAY SUPPORT BARS & TIE WIRES

RELAY SUPPORT BARS

RELAY BAR
18-3/8" LONG
1-1/4" CENTERS
LW PART NO. 2A53705

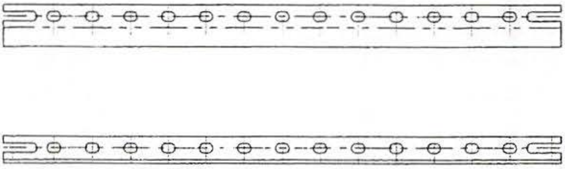
RELAY BAR
19-3/4"" LONG
1-1/4" CENTERS
LW PART NO. 2A53705-1

RELAY BAR
23-1/4" LONG
1-1/4" CENTERS
LW PART NO. 2A53703

RELAY BAR
35-5/8" LONG
1-1/4" CENTERS
LW PART NO. 2A53707-1

RELAY BAR
36-1/2" LONG
1-1/4" CENTERS
LW PART NO. 2A53707

RELAY BAR
47-5/8" LONG
1-1/4" CENTERS
LW PART NO. 2A53707-2



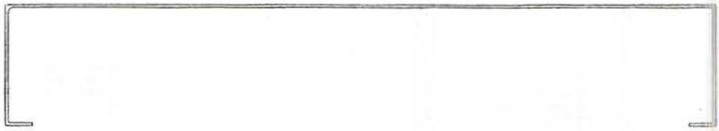
WIRE TIE BARS

WIRE TIE BAR
18-1/8" LONG
4" DEEP
LW PART NO. 2A53706

WIRE TIE BAR
19-7/8" LONG
4" DEEP
LW PART NO. 2A53706-1

WIRE TIE BAR
19-7/8" LONG
4-1/2" DEEP
LW PART NO. 2A53706-2

WIRE TIE BAR
23-3/8" LONG
4" DEEP
LW PART NO. 2A53702



REPLACEMENT PARTS FOR HOUSES & CASES

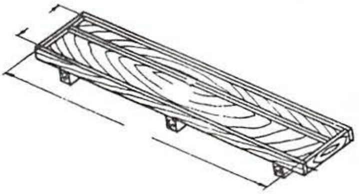
WOOD BATTERY TRAYS

WITH BLACK GILSONITE COATING

11-1/4"W X 57-3/4"L
LW PART NO. 2A53304

11-1/4"W X 32"L
LW PART NO. 2A53307

11-1/4"W X 27"L
LW PART NO. 2A53308

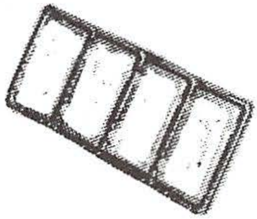


POLY BATTERY TRAYS

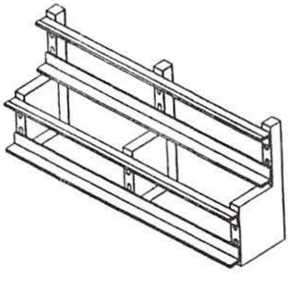
12"W X 24"L
LW PART NO. 2A53309

12"W X 27"L
LW PART NO. 2A53310

12"W X 38"L
LW PART NO. 2A53311



TWO TIER BATTERY RACKS



7" TO 11" WIDE X 32"L
LW PART NO. 2A52455

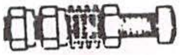
7" TO 11" WIDE X 52"L
LW PART NO. 2A52456

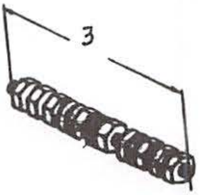
7" TO 11" WIDE X 82"L
LW PART NO. 2A52457

REPLACEMENT PARTS & COMPONENTS FOR HOUSES & CASES

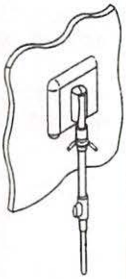
GROUNDING

GROUND BOLT
SQUARE HEAD
14-24 X 1-1/2"L NICKEL PLATE
ALL AAR HARDWARE
LW PART NO. 9A2236-1X





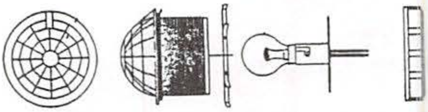
GROUND STUD
14-24 X 3" L NICKEL PLATE
ALL AAR HARDWARE
LW PART NO. 9A2239-X



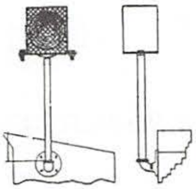
WELDED GROUND
48" LONG PIGTAIL
LW PART NO. FA855C1G36

POWER OFF LIGHTS

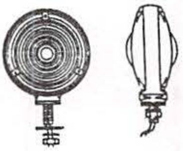
JEWEL TYPE 3" DIA
CLEAR
LW PART NO. 2A70374



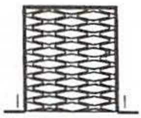
4" PIPE MOUNT
CLEAR
LW PART NO. 2A1673-X



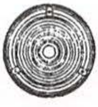
4" LIGHT ONLY
CLEAR WITH RING AND SOCKET
LW PART NO. 2A1019C-5X



4" LENS GUARD
FOR POWER OFF LIGHT
LW PART NO. 2A1670



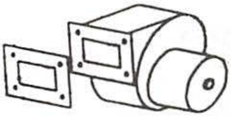
4" LENS CLEAR ONLY
LW PART NO. 7B1018C



REPLACEMENT PARTS & COMPONENTS FOR HOUSES & CASES

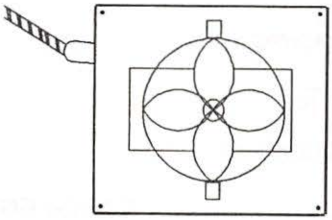
VENT FANS & THERMOSTAT

VENT FAN ONLY
120CFM
AERIAL VENT MOUNT
FOR CASES, 3X4, 4X4 & 4X6 HOUSES
WITH MOUNTING BRACKET & HARDWARE
LW PART NO. 2A51235-3



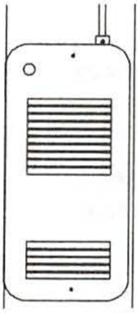
VENT FAN & THERMOSTAT
120CFM
AERIAL VENT MOUNT
FOR CASES, 3X4, 4X4 & 4X6 HOUSES
WITH MOUNTING BRACKET & HARDWARE
LW PART NO. 2A51235-3X

THERMOSTAT ONLY
50 TO 90 DEGREE RANGE
LW PART NO. 2A51238



VENT FAN ONLY
1140 CFM
CEILING MOUNT
FOR 6X6 AND UP
LW PART NO. 2A70304

HEATERS



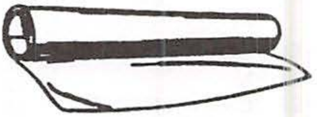
HEATER 240VOLT
WALL MOUNT
1500/1125 W
FOR 3X4, 4X4, 4X6 6X6
LW PART NO. 2A70226

HEATER 240VOLT
WALL MOUNT
4000/3000 W
FOR 6X8 AND UP
LW PART NO. 2A70229

REPLACEMENT PARTS & COMPONENTS FOR HOUSES & CASES

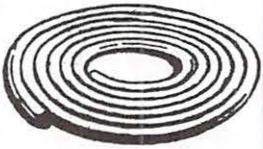
FLOOR MATT

DIAMOND GRIP RUBBER
48" WIDE
LW PART NO. JT53090-###
###=SPECIFY LENGTH DESIRED



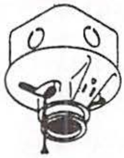
DOOR GASKETING

1/2 THICK
LW PART NO. JR70625



INCANDESCENT LAMP

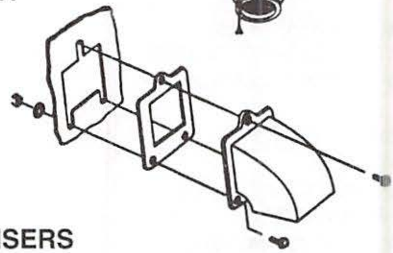
LAMP W/ PULL CHAIN
LESS BULB
LW PART NO. 2A70353



AERIAL CABLE KIT

AERIAL VENT KIT
W/EYEBOLT
LW PART NO. 2A51005-X

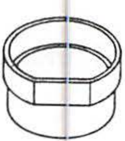
AERIAL VENT KIT
W/O EYEBOLT
LW PART NO. 2A51005-X1

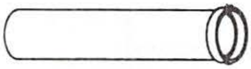


CABLE ENTRANCE RISERS

PVC CABLE RISER
4" DIA X 24" LONG
LW PART NO. 2A55854-X1

PVC CABLE RISER
4" DIA X 36" LONG
LW PART NO. 2A55854-2X



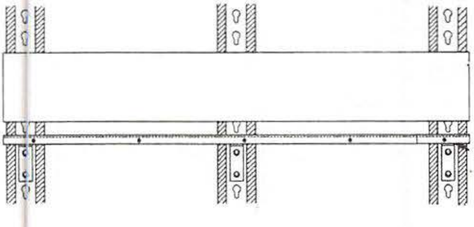


CASE SHELF KITS

CASE SHELF KIT
1 SHELF FOR 81" CASE
LW PART NO. 2A51183-X

CASE SHELF KIT
1 SHELF FOR 60" CASE
LW PART NO. 2A51185-X

CASE SHELF KIT
1 SHELF FOR 41" CASE
LW PART NO. 2A51184-X



TERMINAL & PUSH BUTTON BOXES

PEDESTAL MOUNTED TERMINAL BOXES

FLUSH MOUNTED TERMINAL BOXES

POLE MOUNTED TERMINAL BOXES

REPLACEMENT PARTS

L & W INDUSTRIES

PEDESTAL FLUSH & POLE MOUNT TERMINATION & PUSH BUTTON BOXES

All L&W Termination Boxes are manufactured from quality cast aluminum, fully gasketed for moisture protection and vented.

All internal hardware meets AAR Specifications.

Termination Boxes are designed for
Pedestal Mount,
Flush Mount (Wall)
or Pole Mount.

L&W offers many different size boxes that can be customized with different outlets, terminals, AAR hardware & pedestals to meet your special requirements.

The following pages show many of the standard boxes available from L&W.

If you should have any special requirements, please contact our Sales Office at 1-800-852-5587

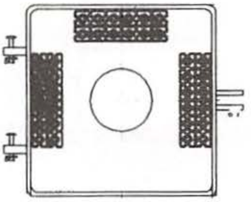
SERIES 3A7005 PEDESTAL BOX

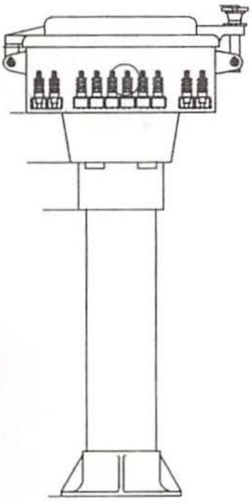
The 3A7005 inside box dimensions are 7-1/2"D x 11-3/4"W x 11-3/4"L

The overall height from base of pedestal to top of box is 31-1/2".
4" Diameter Pedestal is available with or without side cable entrance.

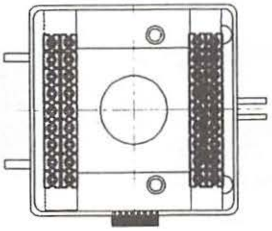
Please contact L&W at 800-852-5587 for other configurations you may require.

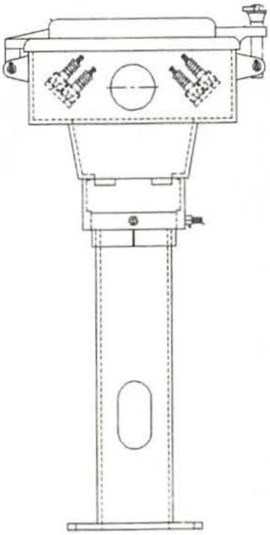
TERMINAL BOX
4" DIA PEDESTAL
36 TERMINALS
AAR HARDWARE
BOTTOM CABLE ENTRANCE
OUTLET FOR 1-1/2" OR 2"
NPT FITTING
LW PART NO. 3A7005-X





TERMINAL BOX
4" DIA PEDESTAL
36 TERMINALS
AAR HARDWARE
SIDE CABLE ENTRANCE
CONNECTOR REDUCER
THREADED 2" TO 1-1/2"
2" LOCKING RING
LW PART NO. 3A7005-3X





SERIES 3A7100 PEDESTAL BOX

The 3A7100 inside box dimensions are 3-5/8"D x 7"W x 9-1/4"L

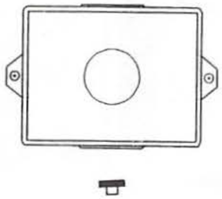
The overall height from base of pedestal to top of box is 23".
3" Diameter Pedestal is available with bottom cable entrance.

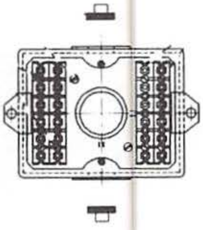
Please contact L&W at 800-852-5587 for other configurations you may require.

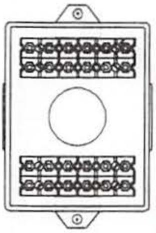
TERMINAL BOX
3" DIA PEDESTAL
NO TERMINALS
PLYWOOD MTG BASE
1EA OUTLET FOR 1-1/2"
OR 2" NPT FITTING
WITH PLUG
LW PART NO. 3A7100-X

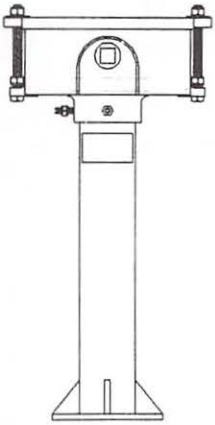
TERMINAL BOX
3" DIA PEDESTAL
24 TERMINALS
AAR HARDWARE
2EA OUTLET FOR 1-1/2"
OR 2" NPT FITTING
WITH PLUGS
LW PART NO. 3A7100-10X

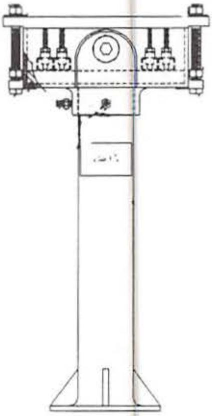
TERMINAL BOX
3" DIA PEDESTAL
24 TERMINALS
AAR HARDWARE
NO OUTLETS
LW PART NO. 3A7100-20X

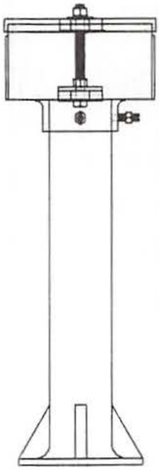












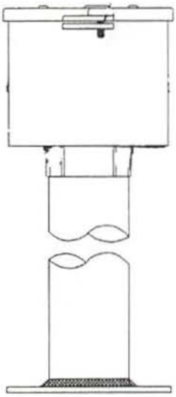
SERIES 3A7112 PEDESTAL BOX

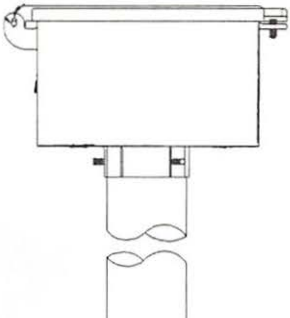
The 3A7112 inside box dimensions are 6"D x 7-1/4"W x 10-1/4"L

The overall height from base of pedestal to top of box is 37".
3" Diameter Pedestal is available with bottom entrance.

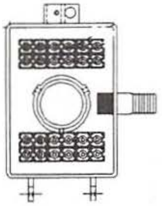
Please contact L&W at 800-852-5587 for other configurations you may require.

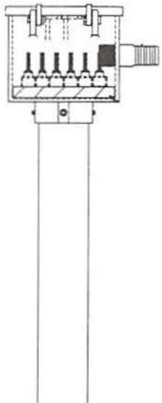
TERMINAL BOX
3" DIA PEDESTAL
NO TERMINALS
NO OUTLETS
LW PART NO. 3A7112-X





TERMINAL BOX
3" DIA PEDESTAL
24 TERMINALS
AAR HARDWARE
OUTLET FOR 1-1/2" NPT
1-1/2" AIR FITTING
LW PART NO. 3A7112-18X





L & W INDUSTRIES

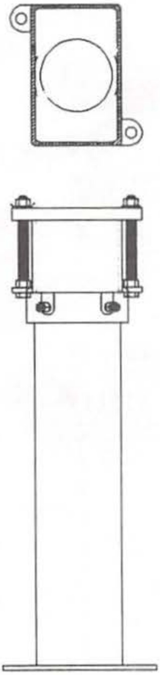
SERIES 3A7300 PEDESTAL BOX

The 3A7300 inside box dimensions are 3-3/4"D x 4-5/16"W x 6-15/16"L

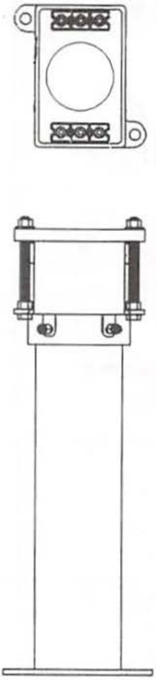
The overall height from base of pedestal to top of box is 24".
4" Diameter Pedestal is available with bottom or side cable entrance.

Please contact L&W at 800-852-5587 for other configurations you may require.

TERMINAL BOX
4" DIA PEDESTAL
NO TERMINALS
BOTTOM CABLE ENTRANCE
LW PART NO. 3A7300-X



TERMINAL BOX
4" DIA PEDESTAL
6 TERMINALS
AAR HARDWARE
BOTTOM CABLE ENTRANCE
LW PART NO. 3A7300-1X



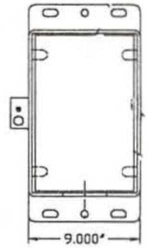
SERIES 3A7120 FLUSH OR POLE MOUNT TERMINAL-PUSH BUTTON- ROUTE SELECTOR BOX

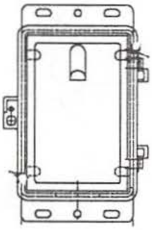
The 3A7120 inside box dimensions are 12-3/4"H x 8-1/2"W x 5-1/4"D

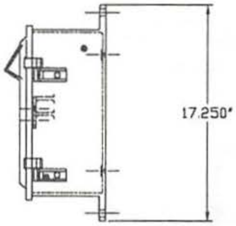
The 3A7120 box can accommodate up to 24 AAR Terminals
or 4 Push Buttons.

Please contact L&W at 800-852-5587 for the box configuration you require.

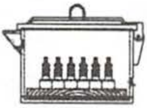
TERMINAL BOX -PUSH BUTTON BOX-ROUTE SELECTOR BOX
FLUSH MOUNT
NO TERMINALS
LW PART NO. 3A7120-X

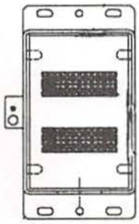




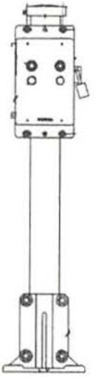


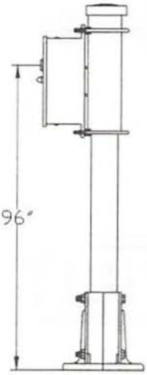
TERMINAL BOX
FLUSH MOUNT
UP TO 24 TERMINALS





ROUTE SELECTOR
4" OR 5" POLE MTG HDW
2 PUSH BUTTONS
2 INDICATOR LIGHTS





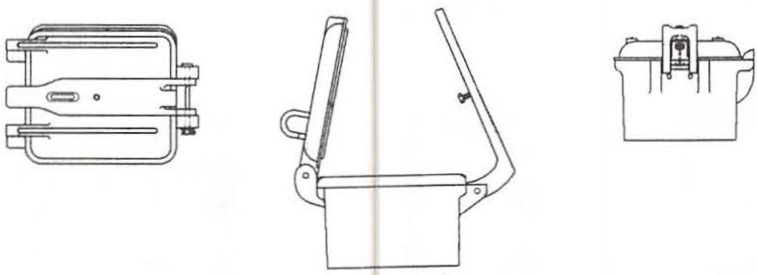
SERIES 3A8000 FLUSH OR POLE MOUNT TERMINAL - PUSH BUTTON - TEST BOX

The 3A8000 inside box dimensions are 3-7/16"D x 4-11/16"H x 5-5/8"L

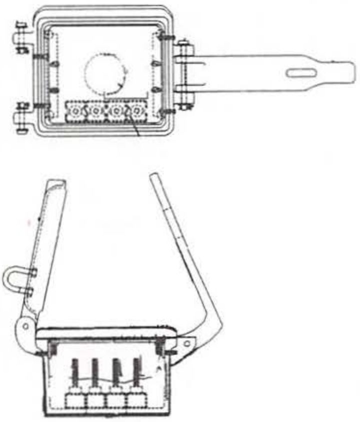
The 3A8000 box can accommodate up to 8 AAR Terminals or 2 Push Buttons.

Please contact L&W at 800-852-5587 for the box configuration you require.

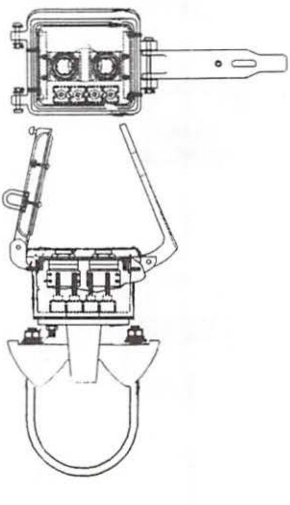
TERMINAL BOX - PUSH BUTTON - TEST BOX
FLUSH MOUNT
NO TERMINALS
LW PART NO. 3A8000-X



TERMINAL BOX
FLUSH MOUNT
UP TO 8 TERMINALS



PUSH BUTTON BOX
POLE MOUNT
4" OR 5" MTG HDW
2 PUSH BUTTONS
4 TERMINALS



BATTERY
BOXES
CASES

FIBERGLASS BATTERY BOXES

ALUMINUM BATTERY CASES

E
E
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E
E
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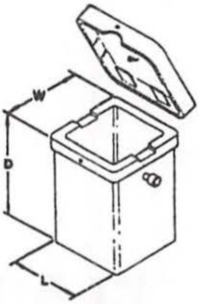
E
E

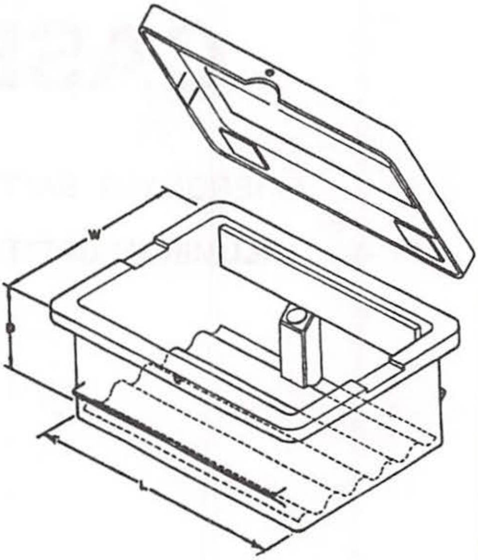
BATTERY ENCLOSURES

FIBERGLASS

SINGLE CELL
11-1/2"D X 13-1/2"L X 9"W
LOCKABLE LID
CABLE ENTRANCE
FROST COVER
ANTI FLOTATION FLANGES
LW PART NO. 4A9007-X



MULTI CELL
21"D X 26"L X 20" W
LOCKABLE LID
CABLE ENTRANCE
FROST COVER
ANTI FLOTATION FLANGES
LW PART NO. 4A9006-X



MULTI CELL
36"D X 36"L X 36"W
LOCKABLE LID
CABLE ENTRANCE
FROST COVER
ANTI FLOTATION FLANGES
LW PART NO. 4A9003-X

BATTERY ENCLOSURES

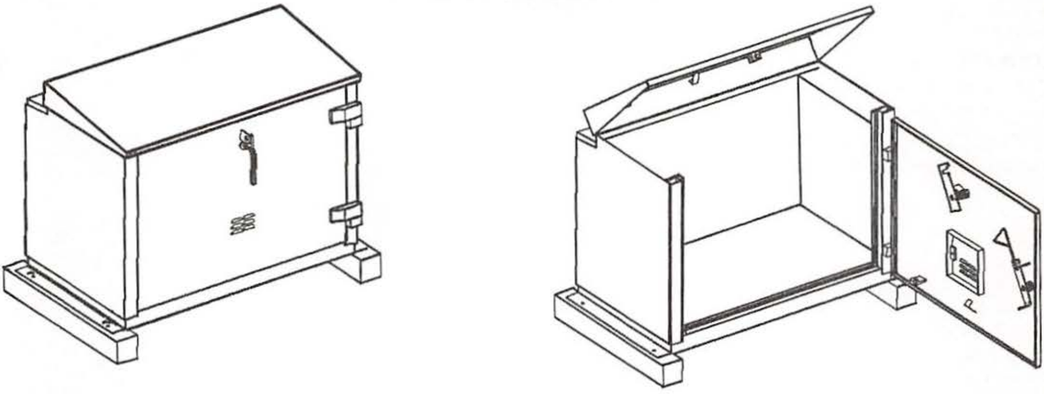
BATTERY CASE

Battery Cases are designed for placement of battery outside of a case or house. The Battery Case can be either attached to the house or mounted on standard galvanized steel case foundations.

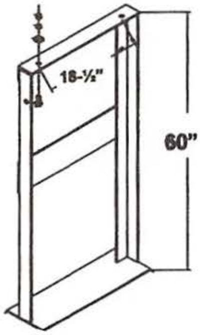
The Battery Case is designed so maintenance personnel can easily access the batteries through the top lid or by removing the front side. All doors are gasketed for moisture protection. Lid and front access side are fully pad lockable.

Aluminum cases are 0.10" aluminum

BATTERY CASE
26-1/4" H X 18" DEEP x 36" WIDE
ALUMINUM
LW PART NO. 0A283618A



BATTERY CASE FOUNDATION
(2 REQUIRED)
LW PART NO. 8A20202-X



NOTE PAGE

SIGNAL BASES

4 & 5 INCH SPLIT BASES

4 & 5 INCH SINGLE JUNCTION BOX BASES

5 INCH DOUBLE JUNCTION BOX BASES

4 INCH SIGNAL BASES
SPLIT & JUNCTION BOX

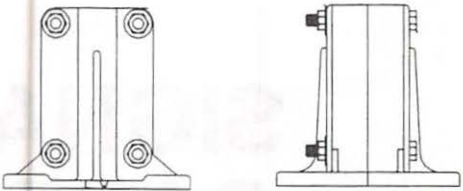
L & W Signal Bases are produced from quality aluminum castings.

Standard hardware is yellow zinc coated.

Junction Boxes come complete with AAR Terminals, Hardware & Connecting Straps.

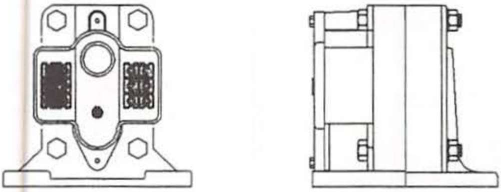
4 INCH SPLIT BASE
9-1/2 X 9-1/2" BOLT SPACING
LW PART NO. 7D5710-X

4 INCH SPLIT BASE
11-1/16 X 11-11/16" BOLT SPACING
LW PART NO. 7D5810-X



4" JUNCTION BOX BASE
9-1/2" X 9-1/2" BOLT SPACING
12 AAR TERMINALS & HARDWARE
CONNECTING STRAPS
LW PART NO. 7D5700-X

4" JUNCTION BOX BASE
11-11/16" X 11-11/16" BOLT SPACING
12 AAR TERMINALS & HARDWARE
CONNECTING STRAPS
LW PART NO. 7D5800-X



L & W INDUSTRIES

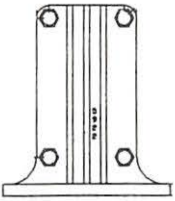
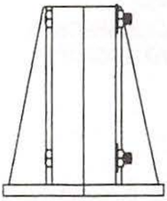
5 INCH SIGNAL BASES
SPLIT & JUNCTION BOX

L & W Signal Bases are produced from quality aluminum castings.

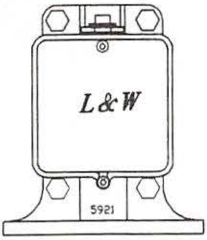
Standard hardware is yellow zinc coated.

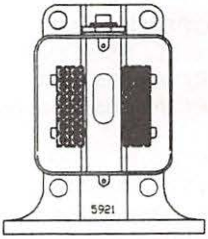
Junction Boxes come complete with AAR Terminals, Hardware & Connecting Straps.

5 INCH SPLIT BASE
11-11/16" X 11-11/16" BOLT SPACING
LW PART NO. 7D5922-X

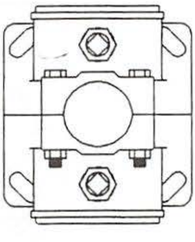
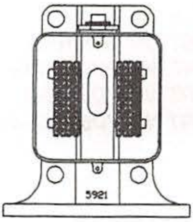



5" JUNCTION BOX BASE
11-11/16" X 11-11/16" BOLT SPACING
12 AAR TERMINALS & HARDWARE
CONNECTING STRAPS
1-1/2" TO 2" NPT
LW PART NO. 7D5920-X





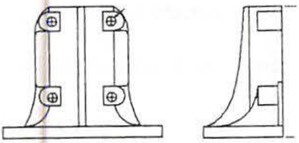
5" DOUBLE JUNCTION BOX BASE
11-11/16" X 11-11/16" BOLT SPACING
12 AAR TERMINALS & HARDWARE
CONNECTING STRAPS
1-1/2" TO 2" NPT
LW PART NO. 7D5950-X

L & W INDUSTRIES

4" & 5" SIGNAL BASE REPLACEMENT PARTS

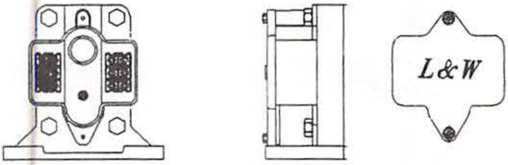
4" SPLIT BASE HALF
9-1/2" BOLT SPACING
LW PART NO. 7D5701



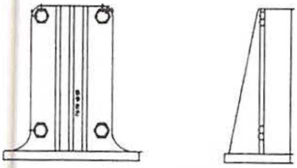
4" SPLIT BASE HALF
11-11/16" BOLT SPACING
LW PART NO. 7D5801

4" JUNCTION BOX HALF
9-1/2" BOLT SPACING
LW PART NO. 7D5702-X
LW PART NO. 7D5703-cover only

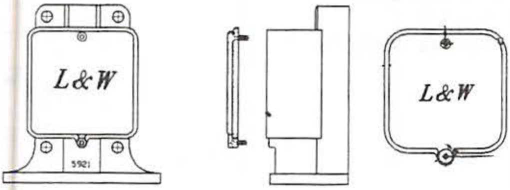
4" JUNCTION BOX HALF
11-11/16" BOLT SPACING
LW PART NO. 7D5802-X
LW PART NO. 7D5803-cover only



5" SPLIT BASE HALF
11-11/16" BOLT SPACING
LW PART NO. 7D5922



5" JUNCTION BOX HALF
11-11/16" BOLT SPACING
LW PART NO. 7D5921-X
LW PART NO. 7D5923A-cover only



GALVANIZED STEEL & CONCRETE FOUNDATIONS

GALVANIZED STEEL-SIGNAL-HOUSE-CASE

CONCRETE-SIGNAL & CANTILEVER

LADDER FOUNDATION

POUR IN PLACE FOUNDATION

ANCHOR BOLTS

ADAPTER PLATES

LEVELING BOLTS

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G
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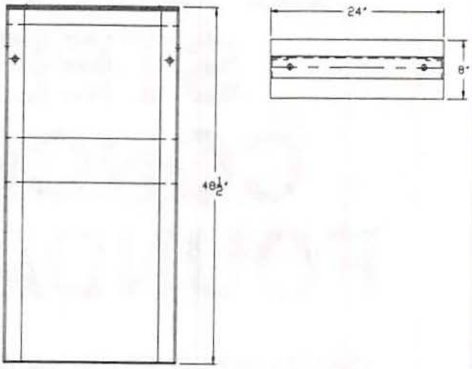
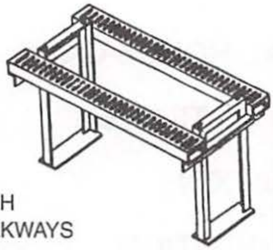
GALVANIZED STEEL FOUNDATIONS

L&W Galvanized Steel Foundations are manufactured from 2-1/2" Angle Iron welded to form a rigid structure that is finished with Hot Dipped Galvanized Coating.
Standard Hardware is Yellow Zinc Coated.

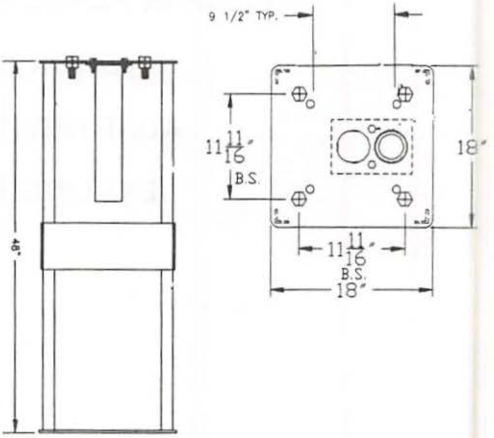
CASE FOUNDATION
48" HIGH 18-1/2" BOLT SPACING
2EA 3/4"-10X2" BOLTS
2 NUTS, 2 WASHERS &
2 LOCKWASHERS
LW PART NO. 8A20101-X





CASE FOUNDATIONS
CAN BE ORDERED WITH
STEEL PLATFORM WALKWAYS

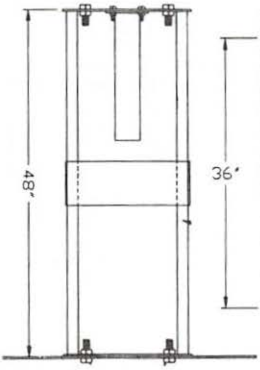
FLASHING LIGHT SIGNAL FOUNDATION
48" TALL 9-1/2" & 11-11/16" BOLT SPACING
4EA 3/4"-10X3" BOLTS
4 NUTS, WASHERS & LOCKWASHERS
CABLE RISER-REVERSIBLE
LW PART NO. 8A20140-1X

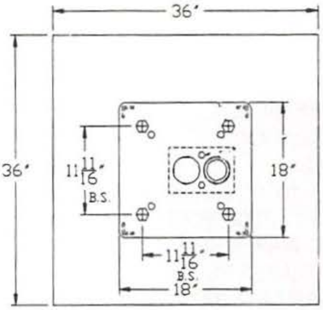


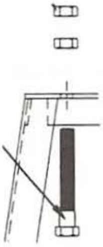
GALVANIZED STEEL FOUNDATIONS

L&W Galvanized Steel Foundations are manufactured from 2-1/2" Angle Iron welded to form a rigid structure that is finished with Hot Dipped Galvanized Coating.
Standard Hardware is Yellow Zinc Coated.

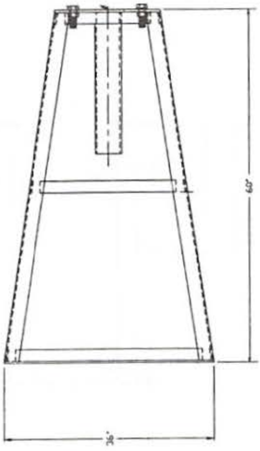
WAYSIDE/FLASHER GATE FOUNDATION
48" TALL 11-11/16" BOLT SPACING
36" SQ BOTTOM PLATE
CABLE RISER-REVERSIBLE
4EA 1"-8X3-1/2" BOLTS
NUTS, WASHERS & LOCKWASHERS
LW PART NO. 8A20140-X

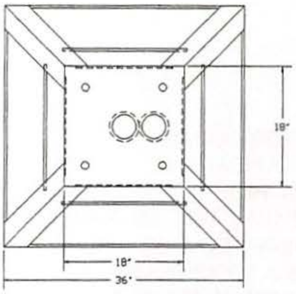






FOUNDATIONS CAN BE
ORDERED WITH LEVELING
BOLTS AND NUTS



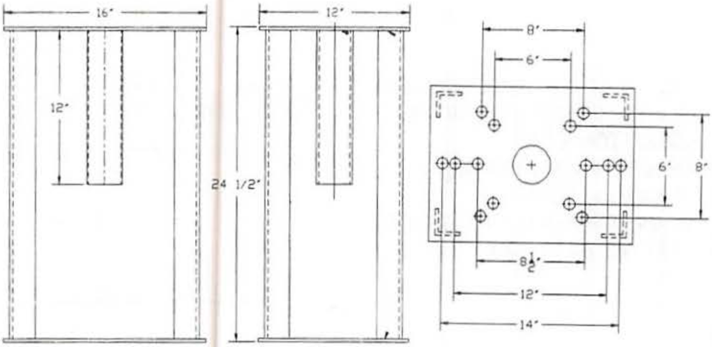


WAYSIDE SIGNAL PYRAMID STYLE
60" TALL 11-11/16" BOLT SPACING
36" SQ BOTTOM PLATE
4EA 1"-8X3-1/2" BOLTS
NUTS, WASHERS & LOCKWASHERS
LW PART NO. 8A20157-X

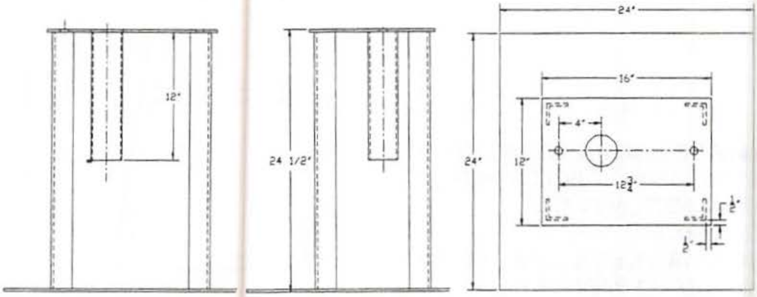
GALVANIZED STEEL FOUNDATIONS

L&W Galvanized Steel Foundations are manufactured from 2-1/2" Angle Iron welded to form a rigid structure that is finished with Hot Dipped Galvanized Coating.
Standard Hardware is Yellow Zinc Coated.

DWARF SIGNAL
FOUNDATION
24" HIGH
6" 8" & 10" BOLT SPACING
4EA 3/4"-10X2" BOLTS
NUTS, WASHERS &
LOCKWASHERS
LW PART NO. 8A20133-X



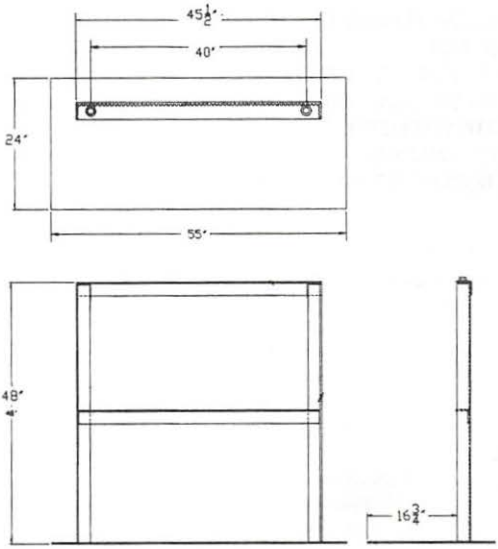
ES20 SIGNAL
FOUNDATION
24" HIGH
2" DIA CABLE ENTRANCE
12-3/4" BOLT SPACING
2EA 5/8"X2" BOLTS
NUTS, WASHERS &
LOCKWASHERS
LW PART NO. 8A20133-6X



GALVANIZED STEEL FOUNDATIONS

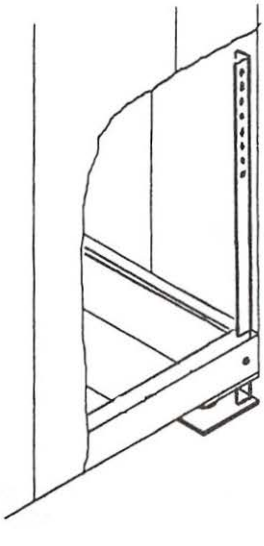
L&W Galvanized Steel Foundations are manufactured from 2-1/2" Angle Iron welded to form a rigid structure that is finished with Hot Dipped Galvanized Coating.
Standard Hardware is Yellow Zinc Coated.

HOUSE FOUNDATION
FOR 3X4 SIGNAL BUNGALOW
48" HIGH
24"X55" BASE PLATE
2EA 3/4"-10X2" BOLT
NUTS, WASHERS &
LOCKWASHERS
LW PART NO. 8A20186-X



DROP DOWN HOUSE FOUNDATION
ALL L&W HOUSES CAN BE SUPPLIED
WITH INTERNAL ADJUSTABLE
DROP DOWN FOUNDATIONS
THEY ARE 60" HIGH WITH
12" SQ BASE PLATE
UPRIGHT IS 3"X3" STEEL ANGLE
WITH 21 INCHES OF ADJUSTMENT
AT 1" INTERVALS.

THE FOUNDATIONS ARE DESIGNED SO NO
VALUABLE INTERNAL SPACE IS TAKEN.

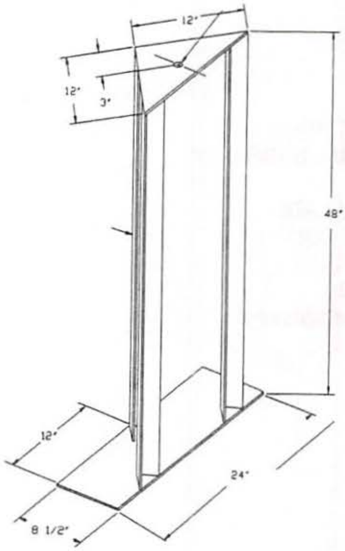


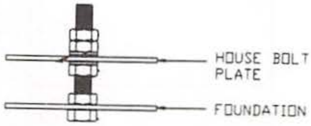
L & W INDUSTRIES

GALVANIZED STEEL FOUNDATIONS

L&W Galvanized Steel Foundations are manufactured from 2-1/2"
Angle Iron welded to form a rigid structure that is finished with
Hot Dipped Galvanized Coating.
Standard Hardware is Yellow Zinc Coated.

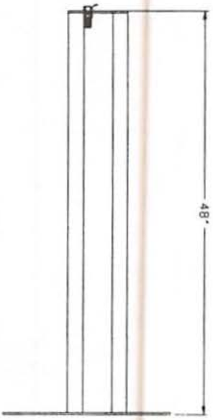
HOUSE FOUNDATION
48" TALL
8"X24" BOTTOM PLATE
1EA 3/4"-10X2" BOLT
NUT, WASHER &
LOCKWASHER
LW PART NO. 8A20126-X

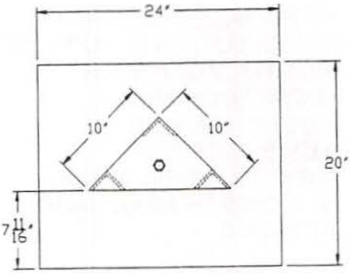




FOUNDATIONS CAN BE
ORDERED WITH LEVELING
BOLTS AND NUTS

HOUSE FOUNDATION
48" TALL
20"X24" BASE PLATE
1EA 3/4"-10X2" BOLT
NUT, WASHER &
LOCKWASHER
LW PART NO. 8A20158-X



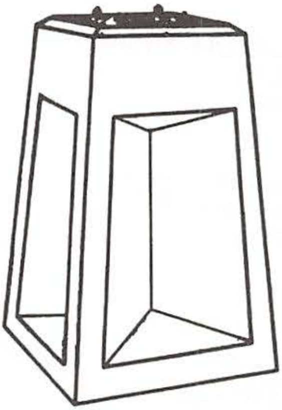


DROP DOWN HOUSE FOUNDATIONS ARE AVAILABLE ONLY AS A COMPONENT OF A FINISHED HOUSE. PLEASE SEE SECTION C HOUSES & CASES

CONCRETE FOUNDATIONS

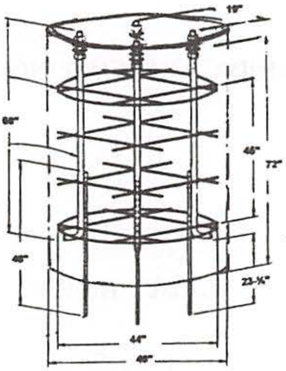
CONCRETE FOUNDATION 1 PIECE
48" TALL
9-1/2" BOLT SPACING
4EA 3/4"-10 BOLTS
NUTS, WASHERS & LOCKWASHERS
4-1/2" BOLT PROJECTION
SHIPPING WEIGHT 720 LBS
LW PART NO. 8AA131721-3X

CONCRETE FOUNDATION 1 PIECE
54" TALL
11-11/16"" BOLT SPACING
4EA 3/4"-10 BOLTS
NUTS, WASHERS & LOCKWASHERS
4-1/2" BOLT PROJECTION
SHIPPING WEIGHT 1640 LBS
LW PART NO. 8AA31721-4X

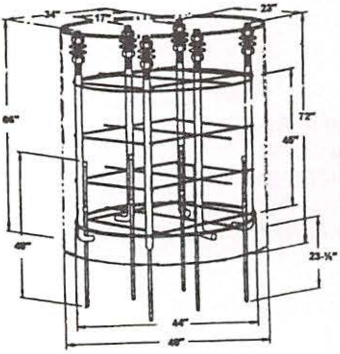


POUR IN PLACE FOUNDATIONS

SINGLE MAST WALKOUT
CANTILEVER
19" X 19" BOLT SPACING
4EA 1" X 66" BOLTS
NUTS, WASHERS &
LOCKWASHERS
WITH REBAR &
48" X 72" SONA TUBE
LW PART NO. 8A031146-000



DOUBLE MAST WALKOUT
CANTILEVER
23" X 17" X 17" BOLT SPACING
4EA 1" X 66" BOLTS
NUTS, WASHERS &
LOCKWASHERS
WITH REBAR &
48" X 72" SONA TUBE
LW PART NO. 8A031120-000



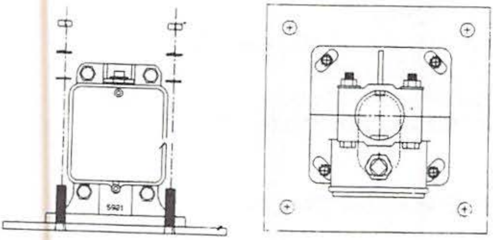
L & W INDUSTRIES

FOUNDATION ACCESSORIES

ADAPTOR PLATES

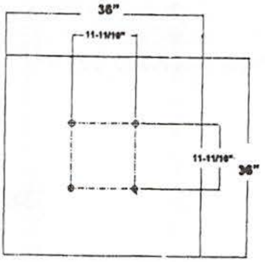
ADAPTOR PLATE GALVANIZED STEEL
FROM 19" TO 11-11/16" BOLT SPACING
LW PART NO. 8A20142-X

ADAPTOR PLATE GALVANIZED STEEL
FROM 9-1/2" TO 11-11/16" BOLT SPACING
LW PART NO. 8A21141-1X



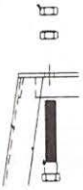
JUNCTION BOX NOT INCLUDED

ADAPTOR/ANCHOR PLATE
CONVERT 8A20140-1X TO 8A20140-X
1/4" THICK X 36" SQUARE
4EA 1"-8X2" BOLTS
NUTS, WASHERS &
LOCKWASHERS
LW PART NO. 8A21144-X
LW PART NO. 8A21144
Plate only less bolts



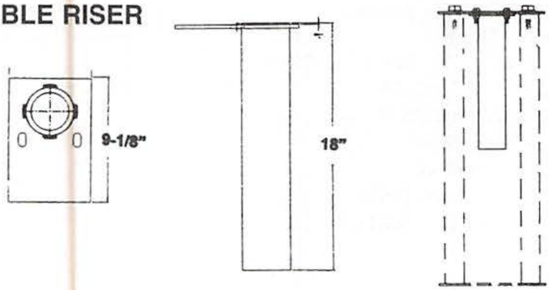
FOUNDATION LEVELING BOLT

BOLT LEVELING BOLT KIT
1EA 1"-8 X 8" BOLTS
3EA NUTS, 4EA WASHERS
LW PART NO. 8A20017-X



CABLE RISER

CABLE RISER
GALV STEEL
FOR 8A20140-X & 8A20140-1X
WITH HARDWARE
LW PART NO. 8A20130-4X



WIRING MATERIALS

AAR NUTS, WASHERS, TERMINAL BLOCKS

TEST LINKS

TEST TERMINALS

INSULATED EYELETS

GROUND BUS BARS & GROUND STUDS

FIXED & ADJUSTABLE RESISTORS

RING TONGUE & FLAG TERMINALS

CONNECTING STRAPS & BINDING POSTS

CASE WIRE-NYLON, TEFZEL, POLY

WIRING TAGS & MARKING PENS

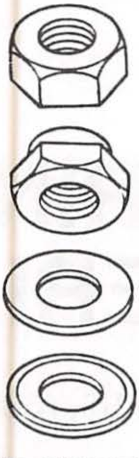
AAR HARDWARE
NUTS WASHERS TERMINAL BLOCKS

AAR CLAMP NUT
LW PART NO. 9A2202
Std Pkg 100ea

AAR BINDING NUT
LW PART NO. 9A2204
Std Pkg 100ea

AAR CLAMP WASHER
LW PART NO. 9A2209
Std Pkg 100ea

AAR BINDING WASHER
LW PART NO. 9A2203
Std Pkg 100ea



TERMINAL BLOCKS

Terminal Blocks can be cut to any desired length.
Std Pkg 10ea on all Terminal Blocks

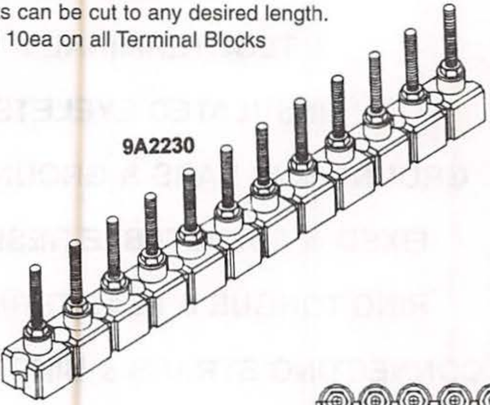
1 X 12 TERMINAL BLOCK
LW PART NO. 9A2230-X
with all AAR Hardware
LW PART NO. 9A2230
with flat nut only

1 X 6 TERMINAL BLOCK
LW PART NO. 9A2230-6X
with all AAR Hardware
LW PART NO. 9A2230-6
with flat nut only

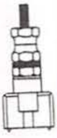
1 X 3 TERMINAL BLOCK
LW PART NO. 9A2230-3X
with all AAR Hardware
LW PART NO. 9A2230-3
with flat nut only

2 x 6 TERMINAL BLOCK
LW PART NO. 9A2231-X
with all AAR Hardware
LW PART NO. 9A2231
with flat nut only

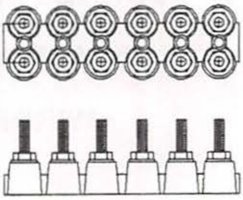
2 POST 2-3/8"
LW PART NO. 9A2233-X
with all AAR Hardware
LW PART NO. 9A2233
with flat nut only



9A2230

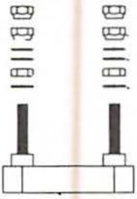


AAR HDW



9A2231

9A2233-X

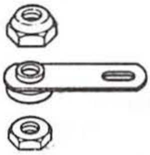


L & W INDUSTRIES

TEST LINKS 1” & 2-3/8” LONG STRAIGHT & OFFSET

Standard Package on Test Links & Gold Nuts 100ea

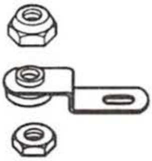
1” TEST LINK STRAIGHT
WITH GOLD NUT
LW PART NO. 9A2205-X



1” TEST LINK STRAIGHT
WITH GOLD NUT & CLAMP NUT
LW PART NO. 9A2205-1X

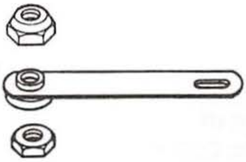
✓ J071682

1” TEST LINK OFFSET
WITH GOLD NUT
LW PART NO. 9A2205-11X

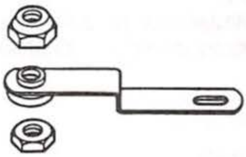


1” TEST LINK OFFSET
WITH GOLD NUT & CLAMP NUT
LW PART NO. 9A2205-7X

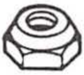
2-3/8” TEST LINK STRAIGHT
WITH GOLD NUT
LW PART NO. 9A2211-X



2-3/8” TEST LINK STRAIGHT
WITH GOLD NUT & CLAMP NUT
LW PART NO. 9A2211-1X



2-3/8” TEST LINK OFFSET
WITH GOLD NUT & CLAMP NUT
LW PART NO. 9A2211-8X



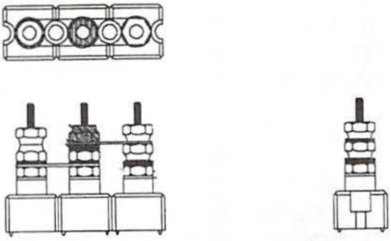
GOLD TEST NUT ONLY
LW PART NO. 9A2208

TEST TERMINAL
INSULATED TEST EYELETS & BUSS BARS

TEST TERMINALS

THREE POST TEST TERMINAL
WITH 1 TEST NUT & 1 TEST LINK
FOR SINGLE SERIES CIRCUIT SWITCH
LW PART NO. 9A2210-X

THREE POST TEST TERMINAL
WITH 2 TEST NUTS & 2 TEST LINKS
FOR DOUBLE SERIES CIRCUIT SWITCH
LW PART NO. 9A2210-1X

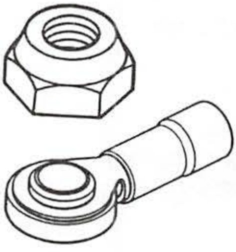


INSULATED TEST EYELETS

Std Pkg 25ea

TEST EYELET ONLY NO 10-12 WIRE
FOR 1/4" TERMINAL
LW PART NO. 9A2207

TEST EYELET WITH GOLD NUT
NO. 10-12 FOR 1/4" TERMINAL
LW PART NO. 9A2207-X

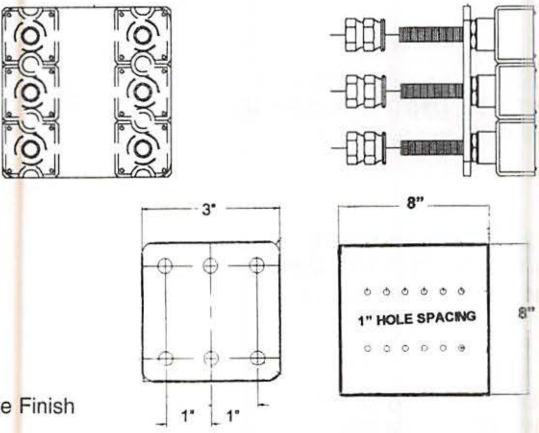


GROUND BUSS BAR

GROUND BUS BAR
WITH TERMINAL BLOCK
AND HARDWARE
LW PART NO. FA23000-X (6 TERMINAL)
LW PART NO. FA23000-1X (12 TERMINAL)

GROUND BUS BAR
ONLY
LW PART NO. FA23000 (6 HOLE)
LW PART NO. FA23000-1 (12 HOLE)

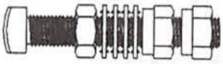
Ground Bus Bar has minimum .003 inch Nickel Plate Finish



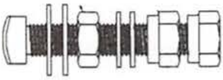
GROUND STUD KITS
BINDING POSTS

GROUND STUD KITS

ROUND STUD 1-1/2" L SQ HD
14-24 NICKEL PLATED
VITH HARDWARE
W PART NO. 9A2236-1X

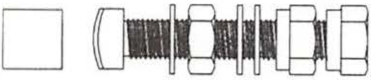


ROUND STUD 1-1/2" L SQ HD
14-24 NICKEL PLATED
VITH HARDWARE
W PART NO. 9A2236-3X



BINDING POSTS

INDING POST 1-1/2" L 3/8" SQ HD
14-24 NICKEL PLATED
VITH HARDWARE
W PART NO. 9A2236-X
W PART NO. 9A2236 (POST ONLY)



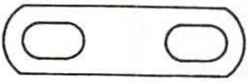
INDING POST 2" L 3/8" SQ HD
14-24 NICKEL PLATED
VITH HARDWARE
W PART NO. 9A2239-X
W PART NO. 9A2239 (POST ONLY)

TERMINAL CONNECTOR STRAPS SOLID SLIDE & BUSS STRAPS

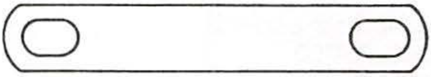
CONNECTING SOLID STRAP

Std Pkg 100ea

CONNECTOR SOLID STRAP
1" CTRS
LW PART NO. 9A2200



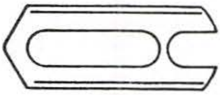
CONNECTOR SOLID STRAP
2-3/8" CTRS AAR10764
LW PART NO. 9A2201



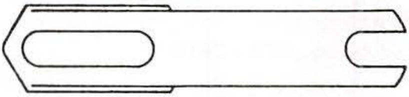
CONNECTING SLIDE STRAPS

Std Pkg 100ea

CONNECTOR SLIDE STRAP
1" CTRS AAR10761
LW PART NO. 9A2215



CONNECTOR SLIDE STRAP
2-3/8" CTRS AAR10762
LW PART NO. 9A2217

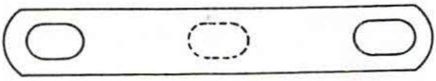


CONNECTING BUSS STRAPS

Std Pkg 10ea

CONNECTOR BUSS STRAP
1" CTRS

LW PART NO. 9A2216-3	***(3 HOLE)***
LW PART NO. 9A2216-4	***(4 HOLE)***
LW PART NO. 9A2216-6	***(6 HOLE)***
LW PART NO. 9A2216-12	***(12 HOLE)***
LW PART NO. 9A2216-24	***(24 HOLE)***
LW PART NO. 9A2216-36	***(36 HOLE)***



WIRE - HOUSE & CASE

TEFZEL

Std Pkg 500ft spool

WIRE CASE #16 AWG
TEFZEL 19 STRANDS TINNED
LW PART NO. DA6448

WIRE CASE #12 AWG
TEFZEL 19 STRANDS
LW PART NO.DA6449-12

WIRE CASE #10 AWG
TEFZEL 37 STRANDS
LW PART NO. DA6449

BLUE PVC

Std Pkg 500ft spool

WIRE CASE #16 AWG
BLUE PVC 19 STRANDS
LW PART NO. DA6408

CASE WIRE #10 AWG
BLUE PVC 19 STRANDS
LW PART NO.DA6409

CASE WIRE #14 AWG
BLUE PVC 19 STRANDS
LW PART NO. DA6410

CASE WIRE #12 AWG
BLUE PVC 19 STRANDS
LW PART NO. DA6430

NYLON BRAID

Std Pkg 500ft Spool

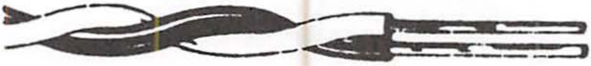
WIRE CASE #14 AWG
NYLON BRAID 19 STRANDS
LW PART NO. DA6400

CASE WIRE #10 AWG
NYLON BRAID 37 STRANDS
LW PART NO.DA6403

WIRE CASE #16 AWG
NYLON BRAID 19 STRANDS
LW PART NO. DA6406

For additional wire and cable, see catalog Section I

WIRE - HOUSE & CASE



TWISTED WIRE

Std Pkg 500ft spool

WIRE CASE #14 AWG
TWISTED PAIR RED & BLACK
19 STRANDS
LW PART NO. DA6450

WIRE CASE #14 AWG
TWISTED PAIR WHITE & BLACK
19 STRANDS
LW PART NO. DA6452

WIRE CASE #10 AWG
TWISTED PAIR RED & BLACK
19 STRANDS
LW PART NO. DA6455

GROUND WIRE - NON INSULATED

Std Pkg 315ft spool

WIRE GROUND #6 AWG
BARE COPPER
SOLID SOFT DRAWN
LW PART NO. DA6422
Std Pkg 315ft spool

For additional wire and cable, see catalog Section I

WIRE EYELET & TERMINALS
RING TONGUE

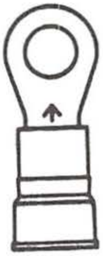
EYELET RING TONGUE HEAVY INSULATED

Std Pkg 100ea

EYELET RING TONGUE INSL #10-12 WIRE #6 STUD
LW PART NO. 9A2241 (AMP 320634)

EYELET RING TONGUE INSL #14-16 WIRE 1/4" STUD
LW PART NO. 9A2242 (AMP 327743)

EYELET RING TONGUE INSL #10-12 WIRE 1/4" STUD
LW PART NO. 9A2243 (AMP 35110)



EYELET RING TONGUE INSL #14-16 WIRE #6 STUD
LW PART NO. 9A2244 (AMP 35634)

EYELET RING TONGUE INSL #6-8 1/4" STUD
LW PART NO. 9A2261 (AMP 52042-3)

EYELET RING TONGUE INSL #22-16 1/4" STUD
LW PART NO. 9A2262 (AMP 31894)

EYELET RING TONGUE INSL #22-16 #6 STUD
LW PART NO. 9A2269 (AMP 341421)

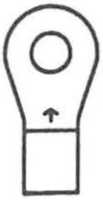
EYELET RING TONGUE INSL #10-12 5/16" STUD
LW PART NO. 9A2282 (AMP 35111)

EYELET RING TONGUE INSL #10-12 1/4" STUD
LW PART NO. 9A2297 (AMP 35627)

EYELET RING TONGUE NON-INSULATED

Std Pkg 100ea

EYELET RING TONGUE NON INSL #22-16 1/4" STUD
LW PART NO. 9A2248 (AMP 34113)



EYELET RING TONGUE NON INSL #6 1/4" STUD
LW PART NO. 9A2253 (AMP 321598)

EYELET RING TONGUE NON INSL #6 5/16" STUD
LW PART NO. 9A2258 (AMP 33466)

EYELET RING TONGUE NON INSL #6-8 3/8" STUD
LW PART NO. 9A2259 (AMP 33467)

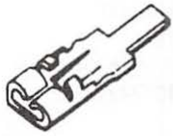
WIRE EYELET FLAG

FLAG TERMINAL FOR STYLE B

Std Pkg 100ea

TERM FLAG #10-14 WIRE
CRIMP B RELAY
LW PART NO. 9A2249
AMP 53889-1

TERM FLAG #16-20 WIRE
CRIMP B RELAY
LW PART NO. 9A2250
AMP 53112-1



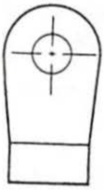
FLAG TONGUE

Std Pkg 100ea

TERM FLAG TONGUE #16-14 WIRE
LW PART NO. 9A322310
AMP 322310

TERM FLAG TONGUE #10-12 WIRE
LW PART NO. 9A322316
AMP 322316

TERM FLAG #10-12 WIRE FOR 1/4" STUD
LW PART NO. 9A35345
AMP



RESISTORS
FIXED & SEALED

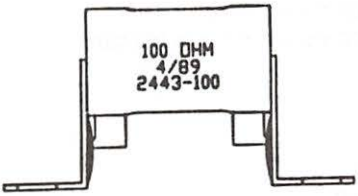
FIXED SEALED RESISTORS

RESISTOR FIXED 2 OHM
SEALED W/MTG BKT 2-3/8" BS
LW PART NO. 9A2243-2X

RESISTOR FIXED 10 OHM
SEALED W/MTG BKT 2-3/8" BS
LW PART NO. 9A2243-10X

RESISTOR FIXED 100 OHM
SEALED W/MTG BKT 2-3/8" BS
LW PART NO. 9A2243-100X

RESISTOR FIXED 500 OHM
SEALED W/MTG BKT 2-3/8" BS
LW PART NO. 9A 2443-500X



ADJUSTABLE RESISTORS

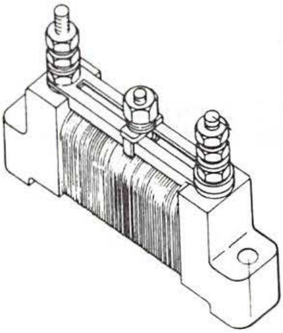
RESISTOR ADJUSTABLE 1 OHM
LW PART NO. 9A1110-1

RESISTOR ADJUSTABLE 2.2 OHM
LW PART NO. 9A1110-3

RESISTOR ADJUSTABLE 4 OHM
LW PART NO. 9A1110-6D

RESISTOR ADJUSTABLE 5.69 OHM
LW PART NO. 9A1110-7D

RESISTOR ADJUSTABLE 8 OHM
LW PART NO. 9A1110-9D

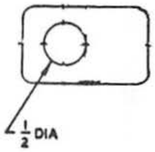


WIRING TAGS & MARKING PEN
WHITE PLASTIC

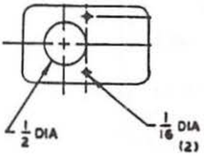
WHITE PLASTIC

Std Pkg 100ea

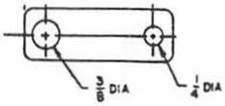
TAG PLASTIC WHITE
1-1/2"L X 7/8"W
1/2" DIA WIRE HOLE
LW PART NO. AA2000-1 (Tag only)
LW PART NO. AA2000-1X (With 1 pen/100 tags)



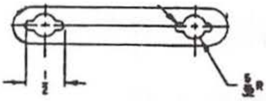
TAG PLASTIC WHITE
1-1/2"L X 7/8"W
1/2" DIA WIRE HOLE
2EA 1/16" MTG HOLES
LW PART NO. AA2006-1 (Tag only)
LW PART NO. AA2006-1X (With 1 pen/100 tags)



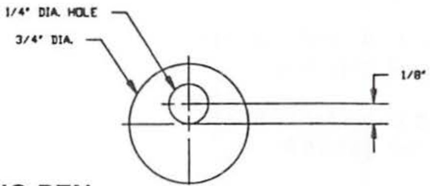
TAG PLASTIC WHITE
2"L X 11/16"W
3/8" WIRE HOLE
1/4" MTG HOLE
LW PART NO. AA2032-1 (Tag only)
LW PART NO. AA2032-1X (With 1 Pen/100 tags)



TAG PLASTIC WHITE
2-7/8" X 1/2"W
2EA 5/16" WIRE HOLES
LW PART NO. AA2035-1 (Tag only)
LW PART NO. AA2035-1X (With 1 Pen/100tags)



TAG PLASTIC WHITE
3/4" DIA ROUND
1/4" OFFSET WIRE HOLE
LW PART NO. AA2067



MARKING PEN

Std Pkg 10EA

PEN MARKING
FOR WHITE PLASTIC &
WHITE FIBER TAGS
LW PART NO. AA2070

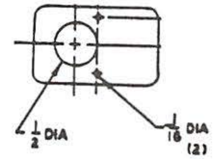
L & W INDUSTRIES

WIRING TAGS
WHITE FIBER

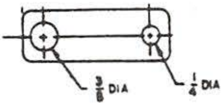
WHITE FIBER TAGS

Std Pkg 100ea

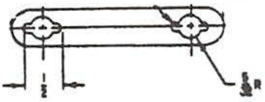
TAG FIBER WHITE
1-1/2"L X 7/8"W
1/2" DIA WIRE HOLE
2EA 1/16" MTG HOLES
LW PART NO. AA2006 (Tag only)



TAG FIBER WHITE
2"L X 11/16"W
3/8" WIRE HOLE
1/4" MTG HOLE
LW PART NO. AA2032



TAG WHITE FIBER
2-7/8" X 1/2"W
2EA 5/16" WIRE HOLES
LW PART NO. AA2035

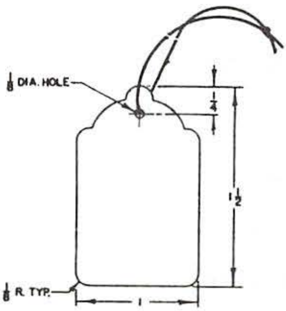


PAPER TAGS W/STRING

Std Pkg 1000ea

TAG PAPER RED
W/STRING
1-1/2"L X 1" W
LW PART NO. AA2700-1

TAG PAPER YELLOW
W/STRING
1-1/2"L X 1" W
LW PART NO. AA2700-2



TAG PAPER GREEN
W/STRING
1-1/2"L X 1" W
LW PART NO. AA2700-3

TAG PAPER WHITE
W/STRING
1-1/2"L X 1" W
LW PART NO. AA2700-4

TAG PAPER BLUE
W/STRING
1-1/2"L X 1" W
LW PART NO. AA2700-5

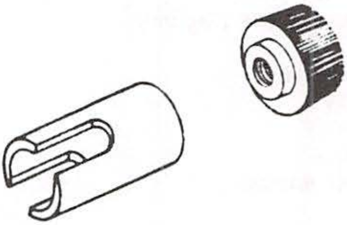
INSULATING CAP & SHIELD
RED & GRAY

GRAY SHIELDS

Std Pkg 50ea

GRAY SHIELD 1-1/8"L
1 SLOT
LW PART NO. 9A2220

GRAY SHIELD 1-1/8"L
1 SLOT W/CAP
LW PART NO. 9A2220-X



GRAY SHIELD 1-7/16"L
1 SLOT
LW PART NO. 9A2222

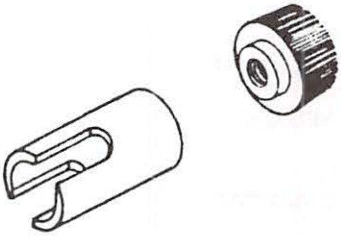
GRAY SHIELD 1-7/16"L
1 SLOT W/CAP
LW PART NO. 9A2222-X

RED SHIELDS

Std Pkg 50ea

RED SHIELD 1-1/8"L
1 SLOT
LW PART NO. 9A2220R

RED SHIELD 1-1/8"L
1 SLOT W/CAP
LW PART NO. 9A2220R-X



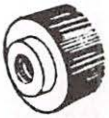
RED SHIELD 1-7/16"L
1 SLOT
LW PART NO. 9A2222R

RED SHIELD 1-7/16"L
1 SLOT W/CAP
LW PART NO. 9A2222R-X

INSULATING CAP FOR 1/4" STUD

Std Pkg 25ea

INSULATING CAP FOR 1/4" STUD
LW PART NO. 9A2221



L & W INDUSTRIES

SIGNAL
WIRE
& CABLE

UNDERGROUND DIRECT BURIAL

TRACK WIRE

BONDSTRAND

GATELAMP WIRE

SIGNAL HEAD CABLE

CASE WIRE

SEE TOOL SECTION Q
FOR RELATED EQUIPMENT USED IN CABLE INSTALLATIONS

SEE WIRING MATERIALS SECTION H
FOR EYELETS & TAGS

SEE TRACK CONNECTION SECTION L
FOR SPLICING SLEEVES, RETAINING CLIPS, & WIRE CLAMPS

UNDERGROUND DIRECT BURIAL

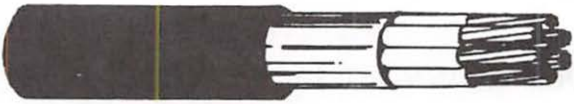
All Underground Direct Burial Cable are manufactured with a heavy duty AAR Class A Insulation offering maximum heat, moisture and chemical resistance.

Conductors are solid coated copper and individually indentified.

All direct burial cable is supplied with bronze armor shield.

Below is ordering references for cables L&W maintains in stock.

For other sizes or additional technical information,
please contact our sales office at 1-800-852-5587.



ORDERING REFERENCES

LW PART NO	WIRE SIZE	CONDUCTORS
DA6653	14 Awg	5 C
DA6652	14 Awg	7 C
DA6657	14 Awg	9 C
DA6654	14 Awg	12 C
DA6665	12 Awg	7 C
DA6662	9 Awg	5 C
DA6656	9 Awg	7 C
DA6650	6 Awg	3 C
DA6651	6 Awg	5 C
DA6655	6 Awg	7 C
DA6650	6 Awg	3 C

Standard Package is 5000ft non-returnable reel.
Cut charge may apply on less than standard package size.

L & W INDUSTRIES

CASE WIRE 1 CONDUCTOR NYLON BRAID-BLUE PVC-TEFZEL

All Case Wires are manufactured with a rugged insulation of either Nylon Braid, Blue PVC or Tefzel offering maximum heat, moisture and chemical resistance.

Conductors are 19 or 37 strands copper for maximum flexibility.

Below are ordering references for Case Wires L&W maintains in stock.

For other sizes or additional technical information, please contact our sales office at 1-800-852-5587.

ORDERING REFERENCES

LW PART NO	WIRE SIZE	JACKET
DA6400	14 Awg 19 Strand	Nylon
DA6403	10 Awg 37 Strand	Nylon
DA6406	16 Awg 19 Strand	Nylon
DA6408	16 Awg 19 Strand	Blue PVC
DA6409	10 Awg 19 Strand	Blue PVC
DA6410	14 Awg 19 Strand	Blue PVC
DA6430	12 Awg 19 Strand	Blue PVC
DA6448	16 Awg 19 Strand	Tefzel
DA6449	10 Awg 37 Strand	Tefzel
DA6449-12	12 Awg 19 Strand	Tefzel

Standard Package is 1000ft spool for wire sizes #16 Awg to #14 Awg .

Standard Package is 500ft spool for wire sizes #12 Awg to #10 Awg.

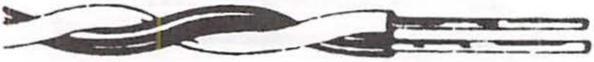
CASE WIRE
2 CONDUCTOR TWISTED PAIR

All Twisted Case Wires are manufactured with a
rugged poly insulation offering
maximum heat, moisture and chemical resistance.

Conductors are 19 strands copper for maximum flexibility.

Below are ordering references for Twisted Case Wires
L&W maintains in stock.

For other sizes or additional technical information,
please contact our sales office at 1-800-852-5587.



ORDERING REFERENCES

LW PART NO	WIRE SIZE	JACKET
DA6450	2C 14 Awg TW 19 Strand TC	Red & Black PVC
DA6452	2C 14 Awg TW 19 Strand TC	Black & White PVC
DA6455	2C 10 Awg TW 19 Strand TC	Red & Black PVC

Standard Package is 1000ft spool for wire sizes
#16 Awg to #14 Awg .

Standard Package is 500ft spool for wire sizes
#12 Awg to #10 Awg.

TRACK WIRE TWISTED PAIR BONDSTRAND

All Track Wires are manufactured with Neoprene Jacket and Rubber Insulation offering maximum heat, moisture and chemical resistance.

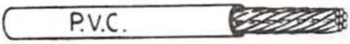
Track Wire Conductors are Solid coated copper.

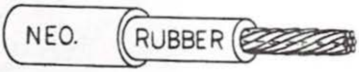
Cutting charge may apply on non standard package.
Bondstrand wires are manufactured from either PVC or Rubber Neoprene.

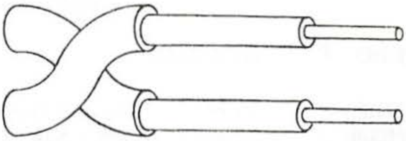
Bondstrand Conductors are 133 strands fully tinned.

Below are ordering references for Track Wires & Bondstrand L&W maintains in stock.

For other sizes or additional technical information, please contact our sales office at 1-800-852-5587.







ORDERING REFERENCES

LW PART NO	WIRE SIZE	JACKET	STD PKG
DA6613	2C 6 Awg Solid TW Track	Red & Black	1000FT
DA6611	2C 9 Awg Solid TW Track	Red & Black	1000FT
DA6625	Bondstrand #6 133 Strand	Black PVC	1000FT
DA6625-1	Bondstrand #6 133 Strand	Black PVC	100FT
DA6625-5	Bondstrand #6 133 Strand	Black PVC	500FT
DA6629	Bondstrand #6 133 Strand	Black Rub/Neo	1000FT
DA6629-1	Bondstrand #6 133 Strand	Black Rub/Neo	100FT
DA6629-5	Bondstrand #6 133 Strand	Black Rub/Neo	500FT
DA6628-1	Bondstrand #6 133 Strand	Non Insulated	100FT
DA6622	Bondstrand #6 133 Strand	Red PVC	1000FT
DA6622-1	Bondstrand #6 133 Strand	Red PVC	100FT

SPECIAL & MISC
WIRE & CABLE

As a distributor of Wire & Cable for major cable manufacturers,
L&W can provide our customers with a complete line of
Wire & Cable for Signal, Communications, Data and Computer.

For information on Wire & Cable not shown in our catalog,
please contact our sales office at 1-800-852-5587.

Below is ordering information on miscellaneous
Wire & Cable L&W maintains in stock.

ORDERING REFERENCES

LW PART NO	WIRE SIZE	JACKET	STD PKG
DA6422 (315ft)	1C #6 Awg Solid Gnd Wire	Non Insulated	315FT
DA6640 (100ft)	3C #16 Gate Lamp Wire	Black SJO SOW	100FT
DA6641 (100ft)	2C #16 Gate Lamp Wire	Black SJO SOW	100FT
DA6642 (100ft)	4C #16 Gate Lamp Wire	Black SJO SOW	100FT
DA6644 (1000ft)	5C #10 CLS Color Coded	Black	1000FT
	(For wiring colorlight heads)		
DA6665 (1000ft)	7C #12 CLS Color Coded	Black	1000FT
	(For wiring colorlight heads)		
DA6658 (1000ft)	17C Composite UG	Black	1000FT
	2C #6, 8C #9 7c #14		
	(For Crossing Installation)	Black	1000FT
DA6663 (1000ft)	3C #2-7X FMPF-L RED TW		
	W/GND 1X6-7X UG W/BT		
	(Power Cable)		

ELECTRONIC EQUIPMENT RELAYS

HIGHWAY CROSSING POWER PACK

TRACK RECTIFIER

RELAYS- NEW & REBUILT

CX1
TYPE C HIGHWAY CROSSING POWER PACK

The L&W CX1 Power Pack was designed to provide power for four AC-DC Track Circuits. AC-DC Track Circuits, also referred to as Style ìCî Track Circuits, have advantages which make them ideal for use at railroad highway crossings in non-signaled territory and industrial environments.

One advantage is that all power equipment, including batteries, can be located in one location. Another advantage is the improved shunting afforded by this type of track circuit.

Normally the power for the track circuits is supplied from the commercial 110volt, 60 HZ AC source, stepped down to 6.3 volts by each of the four secondaries in the CX1 Power Pack.

In the event of an AC power failure, a power off relay transfers the supply for the transformer to an internal inverter which operates from a 10 to 12 volt battery. The amount of standby time is determined by the circuit load and the size of the battery. Each of the four secondaries has a capacity of 6.3 volts, 3.5 amperes. The solid state inverter has a capacity of 100 va.

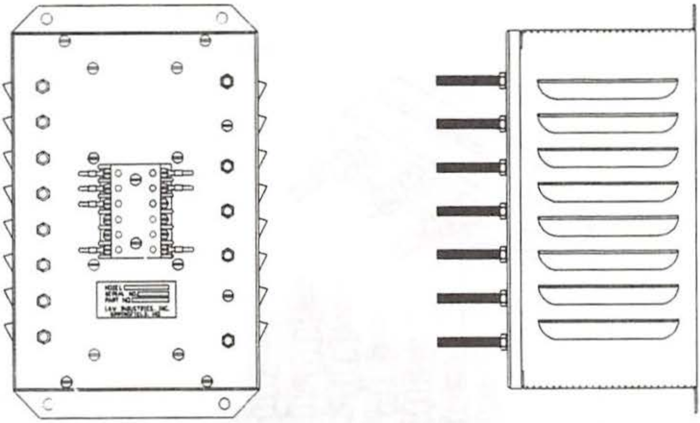
Combined and wired into one unit are the components to perform the functions which normally require one or two transformers, a poweroff relay and an inverter. AAR terminals are provided and clearly marked for the four secondaries, DC inout and the AC input. A terminal also is provided for an inverter output. The combined load for transformer secondaries and this connection must not exceed the 100 va rating of the invertor.

There are no adjustments required for the CX1 Power Pack. Inspection should be made occasionally of the invertor by opening the AC input and checking that the track output voltage is not appreciably reduced.

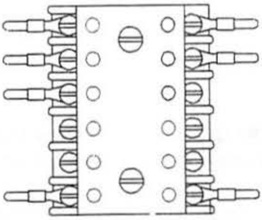
If it is reduced , be sure that battery voltage is no lower than 10 volts. If battery is over 10 volts and track output voltage is , CX1 must be replaced and repaired.

See following page for ordering references, replacment parts and related products

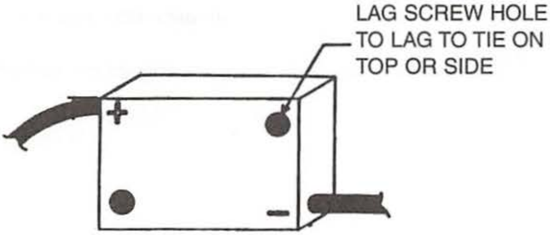
CX1 POWER PACK
TRACK RECTIFIER & REPLACEMENT PARTS



CX1 HIGHWAY CROSSING POWER PACK
INCLUDES POWER TRANSFER RELAY
WITH SOLID STATE INVERTER
LW PART NO. ED2600-X

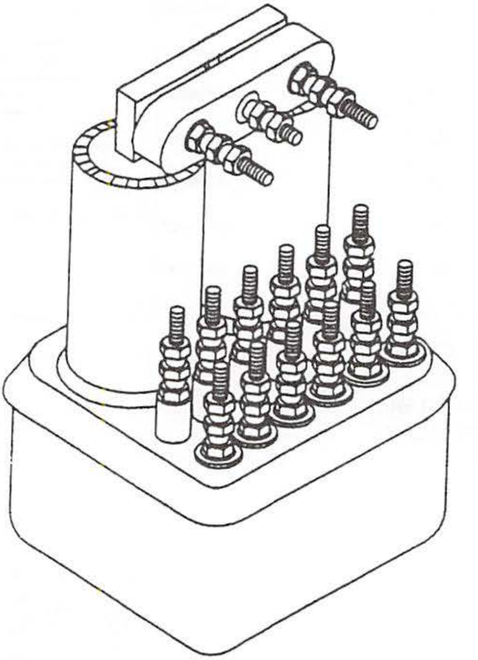


CX1 POWER TRANSFER RELAY
LW PART NO. EB2617


LAG SCREW HOLE
TO LAG TO TIE ON
TOP OR SIDE
+
−

CX1 TRACK RECTIFIER (RING10)
COMPLETE WITH 2 LAG SCREWS
& #6 WIRE LEADS
LW PART NO. EA2610

RELAY
NEW & REBUILT



As a provider of Factory Wiring Services, L&W has in stock a small inventory of new shelf and plug in relays that can be shipped to our customers on an emergency basis if needed.

In addition, L&W has access to numerous used shelf and plug in relays that are rebuilt or can be rebuilt and provided to our customers.

L&W can also rebuild your relays.

For additonal information, please contact our sales office at 1-800-852-5587.

LENSES
PROTECTORS
BULBS

WAYSIDE SIGNAL LENSES

HIGHWAYS CROSSING LENSES

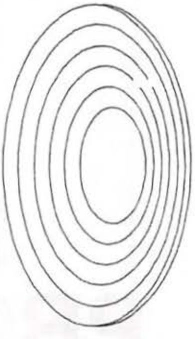
MISCELLANEOUS LENSES

PRECISION SIGNAL BULBS

LENS PROTECTORS

WAYSIDE & DWARF COLORLIGHT SIGNAL LENSES

INNER DOUBLET LENSES-PLASTIC & GLASS



PLASTIC 5 1/2" DIA 1/2" FOCUS

COLOR	*LW PART NO.*
RED	***7B4556PR***
YELLOW	***7B4556PY***
GREEN	***7B4556PG***
LUNAR	***7B4556PL***

GLASS 5-1/2" DIA 1/2" FOCUS

COLOR	*LW PART NO.*
RED	***7C4556GR***
YELLOW	***7C4556GY***
GREEN	***7C4556GG***
LUNAR	***7C4556GL***

OUTER DOUBLET LENSES-PLASTIC-GLASS-LEXAN

PLASTIC CLEAR 6-3/8" DIA 3-3/4" FOCUS
LW PART NO. 7B6560C

PLASTIC CLEAR 6-3/8" DIA 3-3/4" FOCUS
30 DEG SPREADLIGHT
LW PART NO. 7B7180-30-C

PLASTIC CLEAR 8-3/8" DIA 4" FOCUS
NO DEFLECTING BULLSEYE
LW PART NO. 7B4554C
WITH 40 DEG DEFLECTING BULLSEYE
LW PART NO. 7B4554-40C

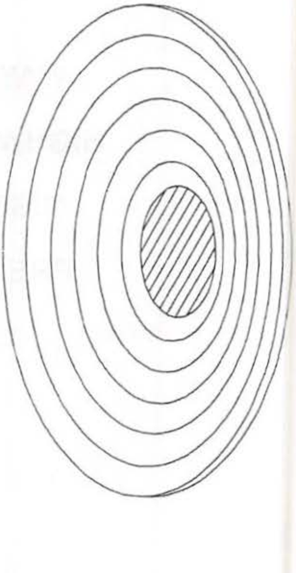
GLASS CLEAR 8-3/8" DIA 4" FOCUS
40 DEG DEFLECTING BULLSEYE
LW PART NO. 7C4554GC

GLASS CLEAR 8-3/8" DIA 5" FOCUS
40 DEG DEFLECTING BULLSEYE
LW PART NO. 7C4592GC

LEXAN CLEAR 8-3/8" DIA 5" FOCUS
NO DEFLECTING BULLSEYE
LW PART NO. 7B6450-C-L
WITH 40 DEG DEFLECTING BULLSEYE
LW PART NO. 7B6450-40C-L

LEXAN CLEAR 8-3/8" DIA 4" FOCUS
NO DEFLECTING BULLSEYE
LW PART NO. 7B6450-C-L

LEXAN CLEAR 8-3/8" DIA 4" FOCUS
30 DEG SPREADLIGHT
LW PART NO. 7B6450-30-C-L



L & W INDUSTRIES

SEARCHLIGHT SIGNAL LENSES

LEXAN 8-3/8" OUTER CLEAR
FLAT 10 DEG DEFLECTING
PLAIN CENTER
LW PART NO. 7B6680-CL

LEXAN 8-3/8" OUTER CLEAR
FLAT PLAIN 1/8" THICK
PROTECTOR
LW PART NO. 7B73-8-L

PLASTIC 8-3/8" OUTER CLEAR
CONVEX COVER LENS
20 DEG DEFLECTING
LW PART NO. 7B6795-C

LEXAN 8-3/8" OUTER CLEAR
OPTICAL
5" FOCUS
LW PART NO. 7B7150-CL

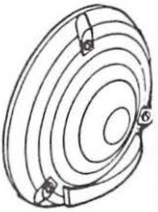
LEXAN 8-3/8" OUTER CLEAR
40 DEG BULLSEYE
5" FOCUS
LW PART NO. 7B7150-40-C-L

GLASS 8-3/8" OUTER CLEAR
PLANO CONVEX
11-1/2" FOCUS
LW PART NO. 7C7311S

LENSES FOR GATELAMPS LW POI & SWITCH LAMPS

4" LENSES

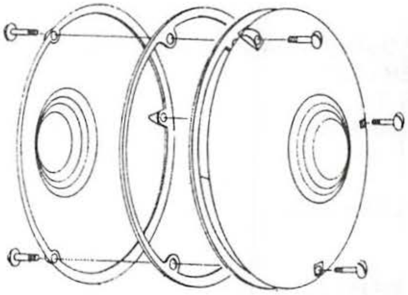
PLASTIC RED FRESNEL
360 DEG
LW PART NO. 7B360-F-R



PLASTIC RED 4" DIA
LW PART NO. 7B1018

PLASTIC RED 4" DIA
KIT OF 2EA
NO HARDWARE
LW PART NO. 7B1018-2

PLASTIC RED 4"DIA
KIT OF 2EA
WITH SCREWS & GASKET
LW PART NO. 7B1026R-X



KIT OF 2 EA

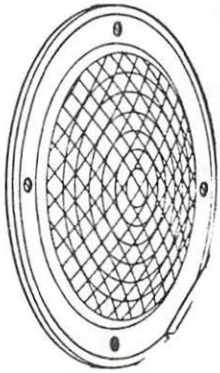
PLASTIC CLEAR 4" DIA
LW PART NO. 7B1018C

PLASTIC CLEAR 4" DIA
KIT OF 2EA
WITH SCREWS & GASKET
LW PART NO. 7B1026C-X

PLASTIC BLUE 4" DIA
LW PART NO. 7B1018B

7" LENSES

PLASTIC RED 7" DIA
LW PART NO. 7B1002



HIGHWAY CROSSING LENSES

8" FLASHER LENSES

PLASTIC RED 8-3/8" DIA
CONVEX
15 DEG DEFLECTION
10 DEG SPREAD
LW PART NO. 7B5092

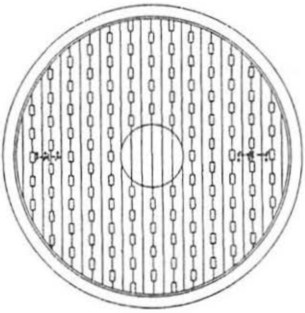
PLASTIC RED 8-3/8" DIA
CONVEX
20 DEG SPREADLIGHT
WITH HOT SPOT
LW PART NO. 7B5091

PLASTIC RED 8-3/8" DIA
CONVEX
32 DEG DEFLECTION
20 DEG SPREAD
LW PART NO. 7B5093

PLASTIC RED 8-3/8" DIA
CONVEX
70 DEG SPREADLIGHT
LW PART NO. 7B5094

PLASTIC 8-3/8" DIA
CONVEX
15 DEG DEFLECTION
30 DEGREE SPREADLIGHT

COLOR	***LW PART NO.***
YELLOW	***7B5092-Y***
RED	***7B5092-G***

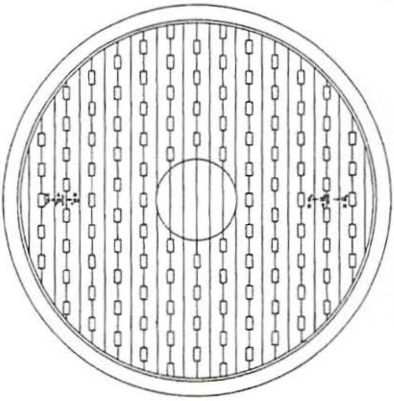


12" FLASHER LENSES

PLASTIC RED 12" DIA
CONVEX
15 DEG DEFLECTION
30 DEG SPREADLIGHT
LW PART NO. 7B5292

PLASTIC RED 12" DIA
CONVEX
20 DEG DEFLECTION
32 DEG SPREADLIGHT
LW PART NO. 7B5293

PLASTIC RED 12" DIA
CONVEX
70 DEG SPREADLIGHT
LW PART NO. 7B5294



SIGNAL BULBS

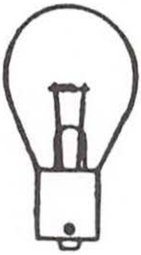
GE SIGNAL BULBS

10V 18W GE
SINGLE CONTACT
BAYONET BASE
SINGLE FILAMENT
LW PART NO. ZA5008
Std Pkg 6ea or 120ea

10V 25W GE
SINGLE CONTACT
BAYONET BASE
SINGLE FILAMENT
LW PART NO. ZA5008-1
Std Pkg 6ea or 120ea

10V 18W / 3.5 WATT GE
SINGLE CONTACT
BAYONET BASE
DUAL FILAMENT
LW PART NO. ZA5008-2
Std Pkg 6ea or 120ea

10V 13W / 3.5 WATT GE
SINGLE CONTACT
BAYONET BASE
DUAL FILAMENT
LW PART NO. ZA5008-6
Std Pkg 6ea or 120ea

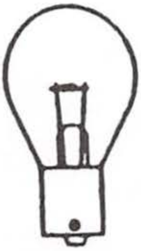


GEMS SIGNAL BULBS

10V 18W GEMS
SINGLE CONTACT
BAYONET BASE
SINGLE FILAMENT
LW PART NO. ZA5008-11
Std Pkg 10

10V 25W GEMS
SINGLE CONTACT
BAYONET BASE
SINGLE FILAMENT
LW PART NO. ZA5008-3
Std Pkg 10

10V 25W GEMS HALOGEN
SINGLE CONTACT
BAYONET BASE
SINGLE FILAMENT
LW PART NO. ZA5008-15
Std Pkg 10

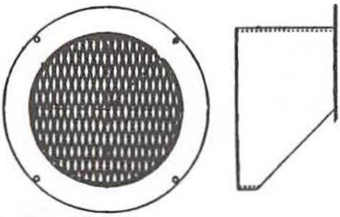


L & W INDUSTRIES

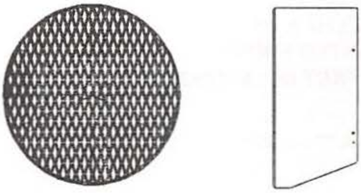
LENS PROTECTORS

COLORLIGHT LENSE PROTECTORS

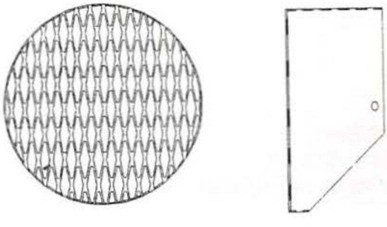
SAFETRAN CLS20
LW PART NO. 5S1701



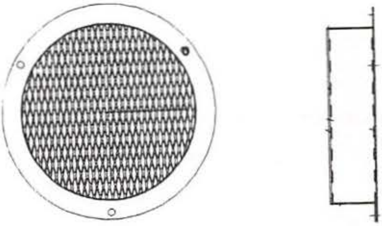
SAFETRAN CLS 10
LW PART NO. 5S1783



GRS TYPE D
LW PART NO. 5S1784



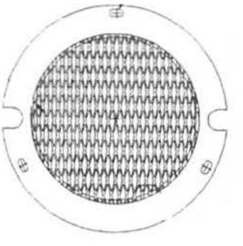
LW TYPE 4500 & 8000
LW PART NO. 5S1801

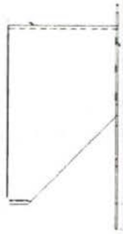


LENS PROTECTORS

DWARF SIGNALS

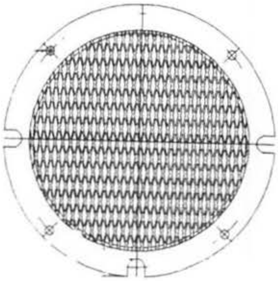
US&S STYLE N2
& LW 6-3/8" DWARF SERIES 4630
LW PART NO. 5S1780

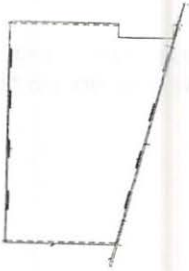




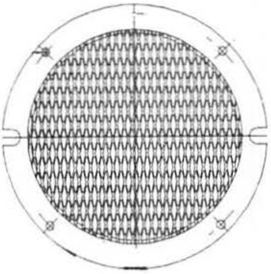
SEARCHLIGHT LENSES PROTECTORS

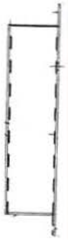
GRS SA-1
US&S H2 & H5
SLANTED FRONT
LW PART NO. 5S1782





GRS SA-1
US&S H2 & H5
LW PART NO. 5S1781

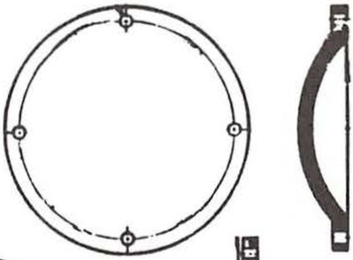




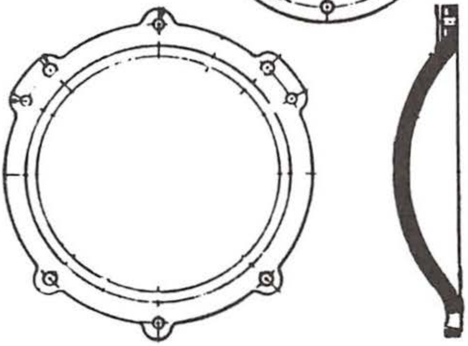
LENS PROTECTORS

LEXAN LENSE PROTECTORS

LEXAN 10" DIA CONVEX
US&S & LW COLORLIGHTS
LW PART NO. 7B77-1-P



LEXAN 10" DIA CONVEX
GRS TYPE & SAFETRAN CL10
LW PART NO. 7B80-2-P



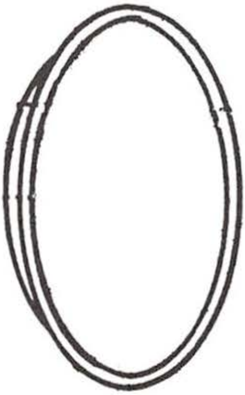
FLASHING LIGHT MIRRORS

12" DIA GLASS MIRROR
DEEP DISH
2-3/8" FOCUS
LW PART NO. 6B6206
Std Pkg 5ea

12" DIA GLASS MIRROR
SHALLOW DISH
4" FOCUS
LW PART NO. 6B5206
Std Pkg 5ea

12" DIA PLASTIC MIRROR
2-3/8" FOCUS
LW PART NO. 6B6207
Std Pkg 5ea

8" DIA GLASS MIRROR
2-3/8" FOCUS
LW PART NO. 6B5006
Std Pkg 5ea



NOTE PAGE

TRACK CONNECTION MATERIALS

SPLICING SLEEVES

REDUCING SLEEVES

RETAINING CLIPS

PLUG BONDS

WELD BONDS

HEAT SHRINK TUBING

BOOTLEG TERMINATION ASSEMBLIES

BOOTLEG PIPE & HOSE

SHUNT HOUSINGS

CABLE COVER PLATES

STAPLES

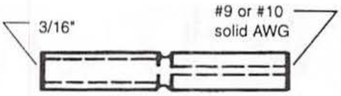
GROUND RODS

GROUNDING MATERIALS

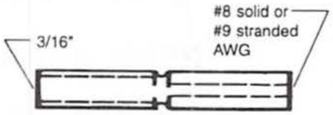
SLEEVES
TERMINAL LUGS

REDUCING SLEEVES FOR BONDSTRAND & TRACKWIRES

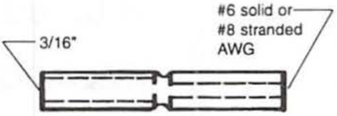
REDUCING SLEEVE
BONDSTRAND (3/16") TO #9 OR
#10 SOLID AWG COPPER
LW PART NO. BA2314J
Std Pkg 100


3/16"
#9 or #10
solid AWG

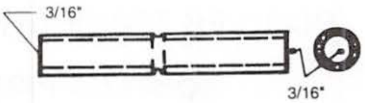
REDUCING SLEEVE
BONDSTRAND (3/16")TO #8 SOLID OR
#9 STRANDED
LW PART NO. BA2364J
Std Pkg 100


3/16"
#8 solid or
#9 stranded
AWG

REDUCING SLEEVE
BONDSTRAND (3/16")TO #6 SOLID OR
#8 STRANDED
LW PART NO . BA2363J
Std Pkg 100

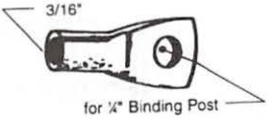

3/16"
#6 solid or
#8 stranded
AWG

SPLICING SLEEVE
BONDSTRAND (3/16") TO BONDSTRAND (3/16")
LW PART NO. BA2367J
Std Pkg 100

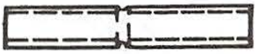


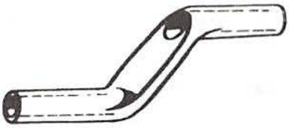
TERMINAL LUG

TERMINAL LUG
BONDSTRAND (3/16") TO 1/4" TERMINAL
POST MOUNTING
LW PART NO. BA2412J


3/16"
for ¼" Binding Post

SLEEVES
SPLICING OFFSET DEADEND





MINIMUM STANDARD PACKAGE ON ALL SLEEVES IS 100/BOX

SPLICING SLEEVES FOR SOLID COPPER

LW PART NO	WIRE SIZE(AWG)	LW PART NO	WIRE SIZE(AWG)
BA1-102J	10 AWG	BA1-114J	9 AWG
BA1-128J	8 AWG	BA1-128M	8 AWG
BA1-162J	6 AWG	BA1-064C	14 AWG
BA1-080C	12 AWG	BA1-080D	12 AWG
BA1-102D	10 AWG	BA1-114D	9 AWG
BA1-128E	8 AWG	BA1-128J	8 AWG

TINNED SPLICING SLEEVES FOR SOLID COPPER

BA1-114DT	9 AWG	BA1-162JT	6 AWG

SPLICING SLEEVES FOR SOLID COPPER COVERED STEEL (COPPERWELD)

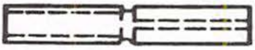
LW PART NO	WIRE SIZE(AWG)	LW PART NO	WIRE SIZE(AWG)
BA1-102J	10 AWG	BA1-114J	9 AWG
BA3-128J	8 AWG	BA1-128M	8 AWG
BA1-162P	6 AWG	BA3-064B	14 AWG
BA1-064C	14 AWG	BA1-064D	14 AWG
BA3-102D	10 AWG		

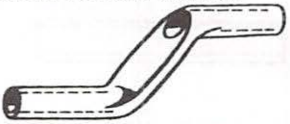
OFFSET DEADEND SLEEVES FOR SOLID COPPER & COPPER COVERED STEEL (COPPERWELD)

LW PART NO	WIRE SIZE(AWG)	LW PART NO	WIRE SIZE(AWG)
BA91-128J	8 AWG	BA91-102J	10 AWG
BA91-162J	6 AWG	BA91-114J	9 AWG

SLEEVES
SPLICING OFFSET DEADEND

MINIMUM STANDARD PACKAGE ON ALL SLEEVES IS 100/BOX





REDUCING SLEEVES FOR SOLID COPPER

LW PART NO	WIRE SIZE(AWG)	LW PART NO	WIRE SIZE(AWG)
BA1-114X102J	9 TO 10 AWG	BA1-162X128J	8 TO 10 AWG
BA1-128X102J	8 TO 10 AWG	BA1-162X114J	6 TO 9 AWG
BA1-162X102J	6 TO 9 AWG	BA1-128X114J	6 TO 12 AWG

SPLICING SLEEVES FOR SOLID COPPER COVERED STEEL (COPPERWELD)

LW PART NO	WIRE SIZE(AWG)	LW PART NO	WIRE SIZE(AWG)
BA1-102J	10 AWG	BA1-114J	9 AWG
BA3-128J	8 AWG	BA1-128M	8 AWG
BA1-162P	6 AWG	BA3-064B	14 AWG
BA1-064C	14 AWG	BA1-064D	14 AWG
BA3-102D	10 AWG		

OFFSET DEADEND SLEEVES FOR SOLID COPPER & COPPER COVERED STEEL (COPPERWELD)

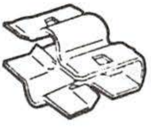
LW PART NO	WIRE SIZE(AWG)	LW PART NO	WIRE SIZE(AWG)
BA91-128J	8 AWG	BA91-102J	10 AWG
BA91-162J	6 AWG	BA91-114J	9 AWG

THE SLEEVES ABOVE ARE ONLY A LISTING OF SOME OF THE MORE COMMON SLEEVES USED. L&W IS A DISTRIBUTOR FOR NATIONAL TELEPHONE (NICOPRESS) AND CAN PROVIDE OUR CUSTOMERS WITH ANY SLEEVE AVAILABLE FROM NATIONAL TELEPHONE.

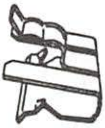
WIRE RETAINING CLIPS
COPPER STAPLES & BONDSTRAND CLAMPS

WIRE RETAINING CLIPS

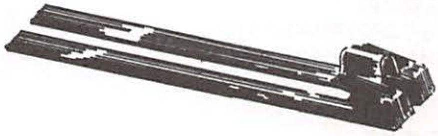
RETAINING CLIP PERPENDICULAR
FOR 3/8" DIA WIRE
SPRING STEEL
LW PART NO. CA248B
Std Pkg 50



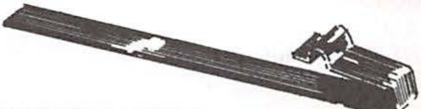
RETAINING CLIP DOUBLE PARALLEL
FOR 3/8" DIA WIRE
SPRING STEEL
LW PART NO. CA251
Std Pkg 50



RETAINING CLIP PERPENDICULAR
ELECTROPLATED STEEL
FOR 5/16" DIA WIRE
LW PART NO. CA2370
Std Pkg 50



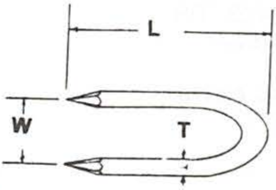
RETAINING CLIP PARALLEL
ELECTROPLATED STEEL
FOR 5/16" WIRE
LW PART NO. CA2380
Std Pkg 50



COPPER STAPLES - DIAMOND POINT

SIZES	***LW PART NO***
1-1/2"L X 5/16"W X 0.144 T	***CA1762***
1-3/4"L X 3/8"W X 0.144 T	***CA1763***
2"L X 1/2"W X 0.162 T	***CA1764***
2"L X 1-1/16"W X 0.162 T	***CA1765***
3"L X 1"W X 0.250 T	***CA1766***

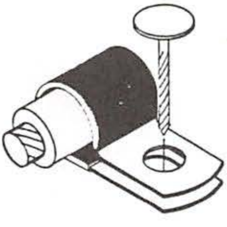
Std Pkg 100

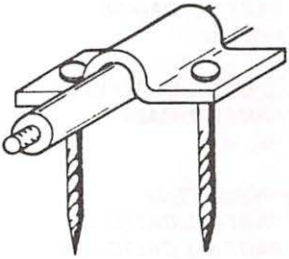


BONDSTAND CLAMPS

1 WIRE POLYPROPYLENE CLAMP
FOR 3/8" DIA WIRE
2 SPIRAL NAILS
LW PART NO. CA1777-X
Std Pkg 100

1 WIRE PLATED METAL INSULATED LOOP
FOR 3/8" DIA WIRE
1 SPIRAL NAIL
LW PART NO. CA1775-X
Std Pkg 100



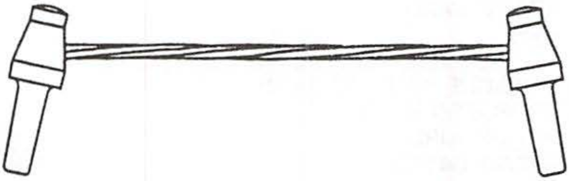


PLUG BONDS

AVAILABLE IN LENGTHS OF 24, 30,34,36,42,48,60,72 & 96 INCHES LONG.
INSERT DESIRED LENGTH IN PART AT ##.
A 24" BOND WOULD BE CAPAJA24.

PLUG BOND
1 COPPER
6 GALV STEEL
LW PART NO. CAPAJA##
Std Pkg 25

PLUG BOND
3 COPPER
16 GALV STEEL
LW PART NO. CAPAJB##
Std Pkg 25

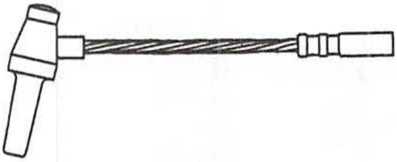


PLUG BOND
7-40% COPPERWELD #10
LW PART NO. CAPAJC##
Std Pkg 25

PLUG BOND
7-40% #12
LW PART NO. CAPAJD##
Std Pkg 25

TRACK CONNECTOR - CHICKEN HEAD

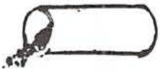
TRACK CONNECTOR
3/1^' - #6 STRAND
4" LONG
LW PART NO. CA1700
Std Pkg 20



FIELD MADE BONDS

BONDSTRAND BARE
LW PART NO. DA6628
Std Pkg 100ft

WELD METAL CARTRIDGE
LW PART NO. CA25
Std Pkg 50



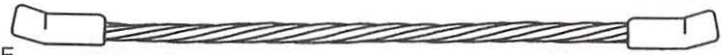
COPPER SLEEVE
LW PART NO. CA11C 3/4" L
LW PART NO. CA12C 1" L
Std Pkg 100

WELD BONDS-WELDERS-MOLDS

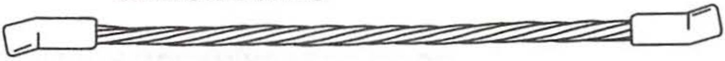
JUMPER BONDS

INSERT DESIRED LENGTH IN PART NO. FOR EXAMPLE,
A 32" JUMPER BOND PART NO. WOULD BE CAXSJ3332

WELD BOND
3/4 XS STYLE
W/SB25 POWDER CARTRIDGE
LW PART NO. CAXSJ33##
Std Pkg 25



SWITCH BONDS

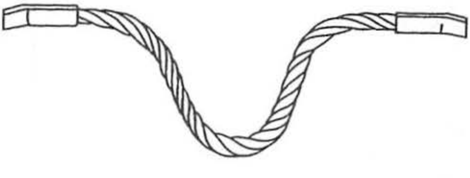


WELD BOND
3/4 XS STYLE
W/SB25 POWDER CARTRIDGE
LW PART NO. CAXSS33##

JOINT HEAD BOND

WELD BOND
XS STYLE
6-1/2" LONG
W/SB25 POWDER CARTRIDGE
LW PART NO. CA24882
Std Pkg 100

9-3/4" LONG
LW PART NO. CA24884
Std Pkg 100

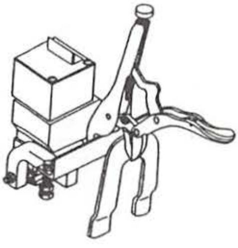


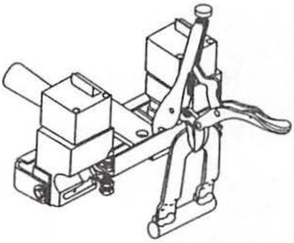
RAIL WELDERS & MOLDS

RAIL HEAD WELDER T-6
6-1/2" XS STYLE
LW PART NO. CAXST6A

RAIL HEAD WELDER T-7
9-3/4" XS
LW PART NO. CAXST7D

MOLDS (PAIR)
3/16"DIA XS
LW PART NO. CAM456

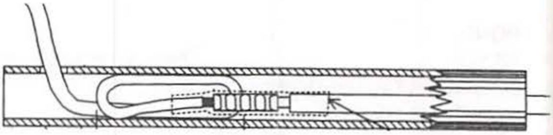




BOOTLEGS

RUBBER HOSE

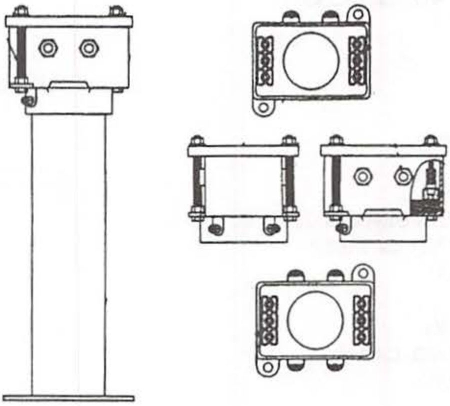
BOOTLEG RUBBER HOSE REINFORCED
1-3/8"DIA X 18" L
DRILLED FOR SIDE WIRE ENTRANCE
LW PART NO. CA1755



BOOTLEG PVC PIPE
3" DIA X 18"L
WITH CAP
SLOTTED FOR SIDE WIRE ENTRANCE
LW PART NO. CA1727-X

BOOTLEG TERMINATION HOUSINGS

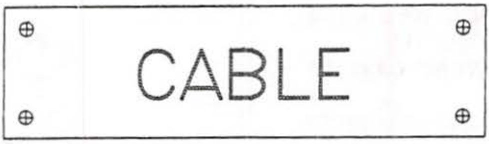
BOOTLEG TERMINATION HOUSING
CAST ALUMINUM BOX
3-15/16"D X 7-5/16"L X 5-5/16"D
ALUMINUM PEDESTAL
2 CABLE ENTRANCES W/CORD GRIPS
4EA AAR TERMINALS W/HARDWARE
23" TOTAL HEIGHT
LW PART NO. CA1721-X



SAME AS ABOVE
EXCEPT WITH 4 CABLE ENTRANCES
LW PART NO. CA1721-19X

BOOTLEG & CABLE PROTECTION PLATES

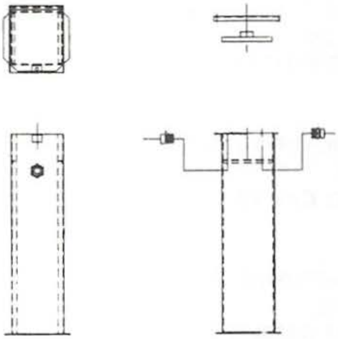
CABLE PLATE
6" X 24" X 1/4"
9/16" HOLES DRILLED FOR LAG SCREWS
MARKED "CABLE" ON TOP
LW PART NO. CA22000



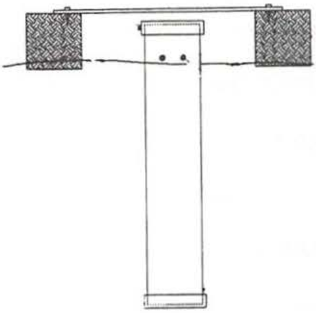
PROTECTIVE PLATE
6" X 24" X 1/4"
NO MARKINGS
9/16" HOLES DRILLED FOR LAG SCREWS
LW PART NO. CA22000-1

SHUNT HOUSINGS

SHUNT HOUSING GALVANIZED STEEL
8" X 8" X 30" H
W/LOCKING LID
2 CABLE ENTRANCES W/GROMMETS
LW PART NO. CA2905-X



SHUNT HOUSING PVC TUBE KIT
8"DIA X 40" H
W/CAP
2 CABLE ENTRANCES W/GROMMETS
LW PART NO. CA1643-3X



BONDWIRE TUBING

BOND WIRE TUBING
1/2" FIBERGLASS REINFORCED
VINYL TUBING
ADDS ADDITIONAL PROTECTION TO
BONDSTRAND WHEN EXPOSED TO
BALLAST
LW PART NO. CA1751
Std Pkg 125ft roll

HEAT SHRINK TUBING

HEAT SHRINK TUBING BLACK
12"L X .750" DIA
LW PART NO. CA1749
Std Pkg 25

HEAT SHRINK TUBING BLACK
6"L X .8" DIA
LW PART NO. CA1760
Std Pkg 10

HEAT SHRINK TUBING BLACK
48"L X 1/8" DIA
LW PART NO. CA70660

HEAT SHRINK TUBING BLACK
48"L X 1/4" DIA
LW PART NO. CA70662

HEAT SHRINK TUBING BLACK
48"L X 3/8" DIA
LW PART NO. CA70663

HEAT SHRINK TUBING BLACK
48"L X 1/2" DIA
LW PART NO. CA70664

HEAT SHRINK TUBING BLACK
48"L X 3/4" DIA
LW PART NO. CA70665

HEAT SHRINK TUBING BLACK
12"L X 1" DIA
LW PART NO. CA70666
Std Pkg 10

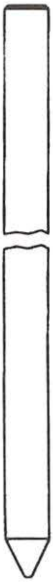
HEAT SHRINK TUBING BLACK
12"L X 1.5" DIA
LW PART NO. CA70667
Std Pkg 10

COLD SHRINK TUBING

COLD SHRINK TUBING
7"L X .039 TO .70 DIA 1000V
LW PART NO. CA1754-2
Std Pkg 10

GROUNDING MATERIALS

GROUND RODS



GROUND ROD COPPER COATED
5/8" DIA 8FT LONG
LW PART NO. FA70400

GROUND ROD COPPER COATED
5/8" DIA 10FT LONG
LW PART NO. FA70400-1

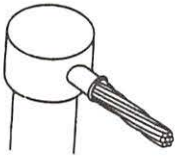
GROUND ROD COPPER COATED
3/4" DIA 8FT LONG
LW PART NO. FA70424

GROUND ROD COPPER COATED
3/4" DIA 10FT LONG
LW PART NO. FA70425

WELDED GROUNDS

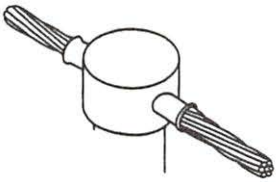
TYPE GR 5/8" GROUND ROD
#6 & 8 SOLID WIRE
LW PART NO. FAGR1161G

TYPE GR 3/4" GROUND ROD
#6 & 8 SOLID WIRE
LW PART NO. FAGR1181G



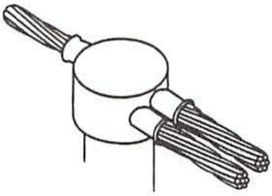
TYPE GT 5/8" GROUND ROD
#6 & 8 SOLID WIRE
LW PART NO. FAGT1161G

TYPE GT 3/4" GROUND ROD
#6 & 8 SOLID WIRE
LW PART NO. FAGT1181G



TYPE NT 5/8" GROUND ROD
#6 & 8 SOLID WIRE
LW PART NO. FANT1161G

TYPE NT 3/4" GROUND ROD
#6 & 8 SOLID WIRE
LW PART NO. FANT1181G



NOTE PAGE

POLELINE HARDWARE

EXPANDING ANCHORS

TIE WIRES & INSULATORS

CROSSARM BRACES

MCKEEN BREAKARMS

GUY & LASHING WIRE CLAMPS

POLE SEATS

CARRIAGE BOLTS

PLEASE CONTACT OUR SALES OFFICE
FOR OTHER POLELINE REQUIREMENTS.

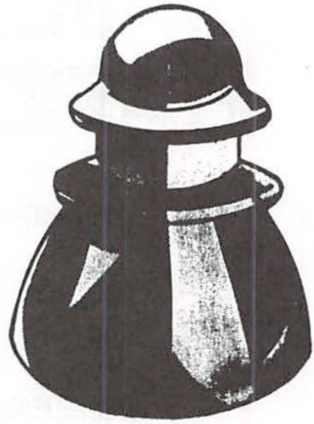
POLELINE HARDWARE

TIE WIRES

#10 AWG TIE WIRE
30% HARD COPPER
2/64" INSULATION
26" LONG
LW PART NO. FA6460
Std Pkg 100ea

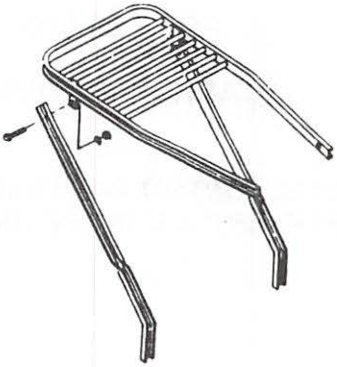
INSULATOR

INSULATOR POLY
4" H 1" PIN HOLE SIZE
OUTSIDE SKIRT 3-1/2" DIA
1 5/8" GROOVE DIA
LW PART NO. FA1800
Std Pkg 100ea



POLE SEAT

POLE SEAT
GALVANIZED
CHANNEL STEEL
1500 PD CAPACITY
LW PART NO. FA16550-X

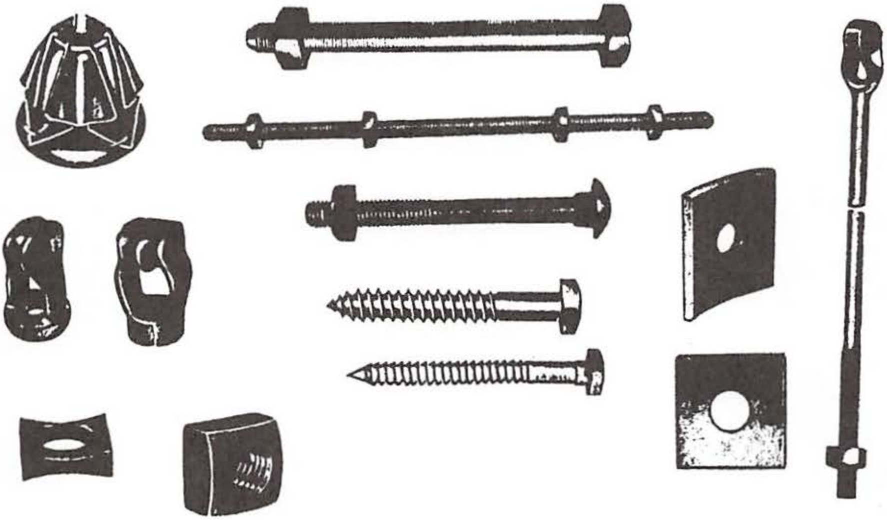


L & W INDUSTRIES

POLELINE

L&W IS A DISTRIBUTOR FOR AB CHANCE, RELIABLE, HUBBELL,
BLACKBURN, KLEIN, OSKOSH & PREFORMED

PLEASE CONTACT L&W AT 1-800-852-5587 TO GET
QUOTE ON ANY OF THE FOLLOWING POLELINE PRODUCTS



WIRE MOLDING
DOUBLE ARMING BOLTS
STRAND GUY CLAMPS
CABLE GUARDS
CROSSARM PINS
GALVANIZED WASHERS
MC KEEN BREAKARMS
X-ARM BRACES
TRANSPOSITION BKTS
STRANVISES
THIMBLE EYE BOLTS

GUY GUARDS
MACHINE BOLTS
CLEVISES
HOOKS & STEPS
ANCHOR RODS
LAG SCREWS
GUY CLAMPS
CROSSARMS
OSKOSH DIGGERS
GRIPS
POLE STEPS

CARRIAGE BOLTS
EYE BOLTS
EYE NUTS
CURVED LOCKNUTS
EXPANDING ANCHORS
PORCELAIN INSULATORS
LASHING CLAMPS
SPLIT BOLT CONNECTOR
OSKOSH SPOONS
KLEIN CLIMBING EQUIP.
KLEIN TOOLS

NOTE PAGE

SWITCH LAYOUTS

FRONT ROD ASSEMBLIES

ADJUSTMENT BASKET ASSEMBLIES

POINT DETECTOR RODS

SWITCH CIRCUIT CONTROLLER RODS

THROW RODS

POINT LUGS

DROP LUGS

PIPE LINE FITTINGS

TIE STRAPS

COUPLERS, THROW ROD

TIE BOLT KITS

POINT LUG BOLT ASSEMBLIES

VERTICAL SWITCH RODS

HORIZONTAL SWITCH RODS

GAUGE PLATE ASSEMBLIES

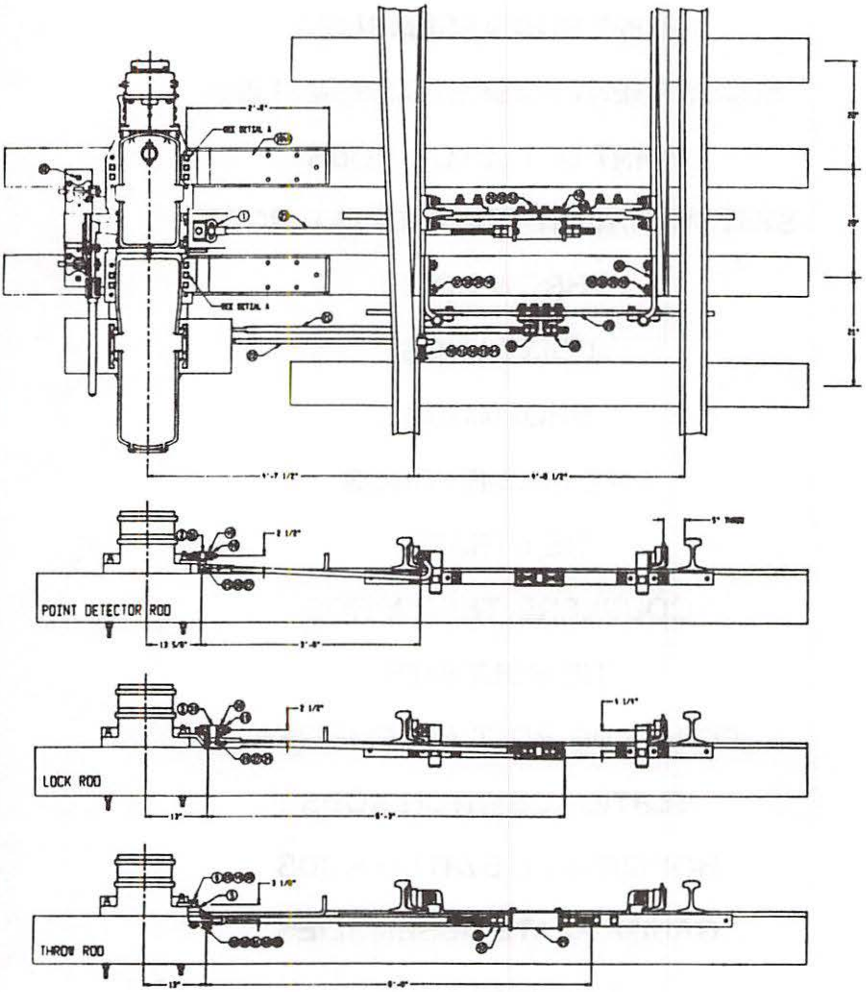
LATCH STANDS

SWITCH LAYOUTS

Switch Layouts can be provided to fit your required specifications, as packaged units or individual forged components.

We can design a Switch Layout from customer specifications.

Our experienced staff will visit your sites and assist in the design of your Switch Layout.

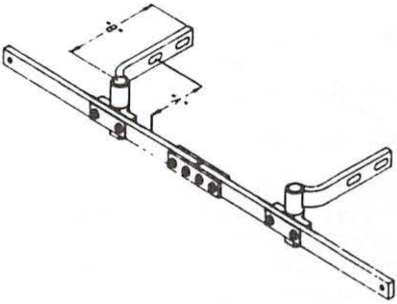

SEE DETAIL A
SEE DETAIL A
POINT DETECTOR ROD
LOCK ROD
THROW ROD

FRONT ROD ASSEMBLIES

SWIVEL TYPE

FRONT ROD WITH 4 1/4" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=6 1/2" TO 8"
LW PART NO. HL996977-001

FRONT ROD WITH 5 5/16" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=6 1/2" TO 8"
LW PART NO. HL996977-003

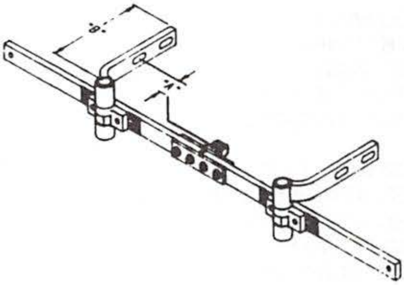


FRONT ROD WITH 4 1/4" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=8 1/2" TO 10"
LW PART NO. HL996977-005

FRONT ROD WITH 5 5/16" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=8 1/2" TO 10"
LW PART NO. HL996977-007

FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=1/2" TO 2"
LW PART NO. HL996970-001

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=1/2" TO 2"
LW PART NO. HL996970-003



FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=2 1/2" TO 4"
LW PART NO. HL996970-005

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=2 1/2" TO 4"
LW PART NO. HL996970-007

FRONT ROD ASSEMBLIES

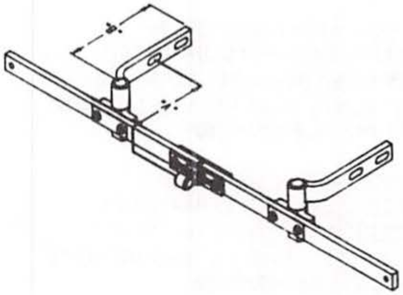
SWIVEL TYPE

FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=7 1/2" TO 9"
LW PART NO. HL996978-001

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=7 1/2" TO 9"
LW PART NO. HL996978-003

FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=9 1/2" TO 11"
LW PART NO. HL996978-005

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=9 1/2" TO 11"
LW PART NO. HL996978-007

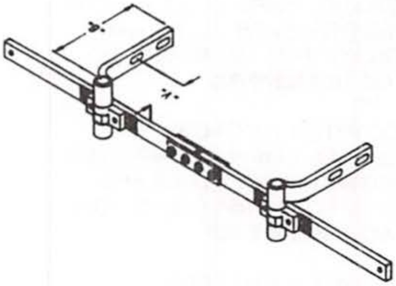


FRONT ROD WITH 4 1/4" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=3 1/2" TO 5"
LW PART NO. HL996976-001

FRONT ROD WITH 5 5/16" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=3 1/2" TO 5"
LW PART NO. HL996976-003

FRONT ROD WITH 4 1/4" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=5 1/2" TO 7"
LW PART NO. HL996976-005

FRONT ROD WITH 5 5/16" DROP
ON CENTER. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=5 1/2" TO 7"
LW PART NO. HL996976-007

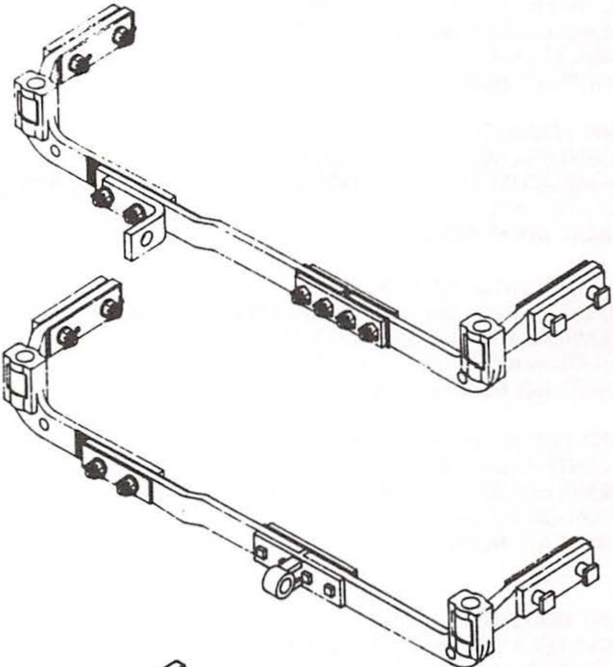


FRONT ROD ASSEMBLIES

SWIVEL TYPE

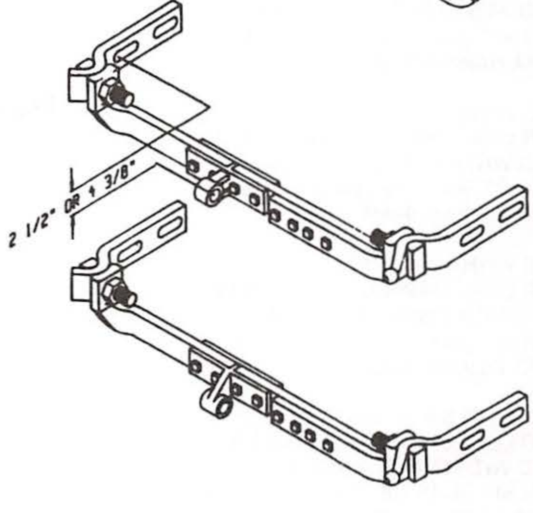
FRONT ROD-MF STYLE
VITH OFFSET CENTER
UG ANGLE. SHIPPED
COMPLETELY ASSEMBLED
VITH INSULATION KIT.
W PART NO. HL996223-000

FRONT ROD-MF STYLE
VITH FORGED CENTER
UG. SHIPPED COMPLETELY
ASSEMBLED WITH
NSULATION KIT.
W PART NO. HL996224-000



FRONT ROD WITH 2 1/2" DROP
ON CENTER LUG. SHIPPED
COMPLETELY ASSEMBLED
VITH T'BOLTS AND
NSULATION KIT.
W PART NO. HL996809-100

FRONT ROD WITH 4-3/8" DROP
ON CENTER LUG. SHIPPED
COMPLETELY ASSEMBLED
VITH T'BOLTS AND
NSULATION KIT.
W PART NO. HL996809-000



FRONT ROD ASSEMBLIES

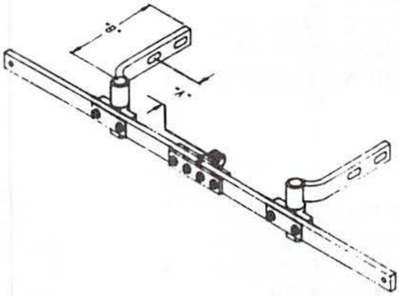
SWIVEL TYPE

FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=3 1/2" TO 5"
LW PART NO. HL996971-001

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=3 1/2" TO 5"
LW PART NO. HL996971-003

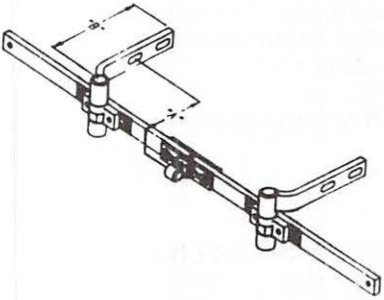
FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=5 1/2" TO 7"
LW PART NO. HL996971-005

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=5 1/2" TO 7"
LW PART NO. HL996971-007



FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=10 1/2" TO 12"
LW PART NO. HL996979-001

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=13 1/8" B=10 1/2" TO 12"
LW PART NO. HL996979-003



FRONT ROD WITH 4 1/4" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=12 1/2" TO 14"
LW PART NO. HL996979-005

FRONT ROD WITH 5 5/16" DROP
ON CENTER LUG. SHIPPED COMPLETELY
ASSEMBLED WITH SWIVEL LUGS AND
INSULATION KIT. A=15 1/8" B=12 1/2" TO 14"
LW PART NO. HL996979-007

POINT DETECTOR RODS
NEAR RAIL & FAR RAIL

POINT DETECTOR RODS (NEAR RAIL)

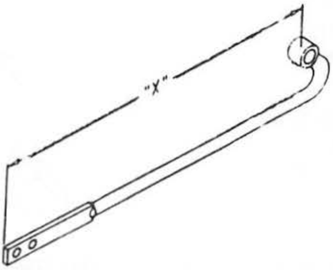
POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=3'
LW PART NO. HL996013-000

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=3' 8"
LW PART NO. HL996013-001

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=3' 11"
LW PART NO. HL996013-002

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=6' 1"
LW PART NO. HL996013-003

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=6' 7"
LW PART NO. HL996013-004



POINT DETECTOR RODS (FAR RAIL)

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=6'-4"
LW PART NO. HL996159-000

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=6'-8 1/2"
LW PART NO. HL996159-001

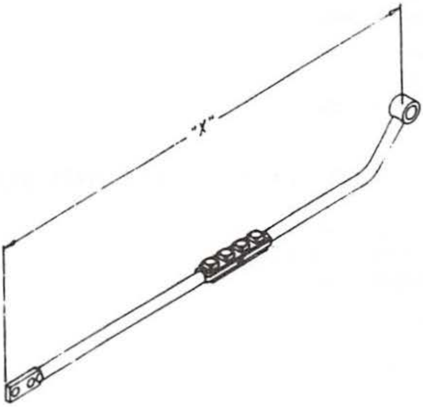
POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7'-0"
LW PART NO. HL996159-002

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7'-2 1/2"
LW PART NO. HL996159-003

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7'-8 1/2"
LW PART NO. HL996159-005

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7'-10"
LW PART NO. HL996159-006

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=8'-9"
LW PART NO. HL996159-007

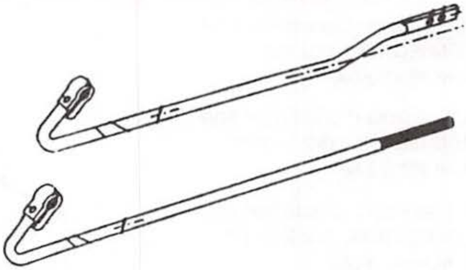


POINT DETECTOR RODS
SWITCH CIRCUIT CONTROLLER RODS

POINT DETECTOR RODS WITH SWIVEL END (NEAR RAIL)

POINT DETECTOR ROD
FOR NEAR RAIL CONNECTION
47" LONG 1 1/2" DIAMETER
LW PART NO. HL996138-000

POINT DETECTOR ROD
FOR NEAR RAIL CONNECTION
49" LONG 1" DIAMETER
LW PART NO. HL996894-000



SWITCH CIRCUIT CONTROLLER RODS (NEAR RAIL)

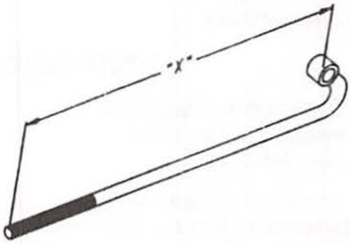
CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=2'-10"
LW PART NO. HL996125-000

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=3'-4"
LW PART NO. HL996125-001

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=3'-6"
LW PART NO. HL996125-002

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=3'-10"
LW PART NO. HL996125-003

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=4'-10"
LW PART NO. HL996125-004

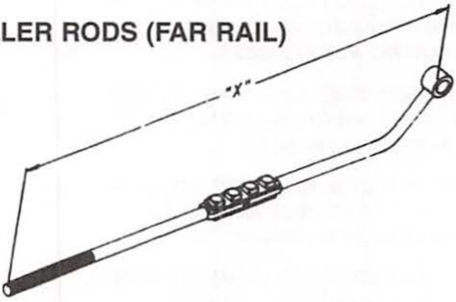


SWITCH CIRCUIT CONTROLLER RODS (FAR RAIL)

CONTROLLER ROD 1" DIAMETER FOR
FAR RAIL CONNECTION. DIM X=7'-6"
LW PART NO. HL996158-000

CONTROLLER ROD 1" DIAMETER FOR
FAR RAIL CONNECTION. DIM X=7'-2"
LW PART NO. HL996158-001

CONTROLLER ROD 1" DIAMETER FOR
FAR RAIL CONNECTION. DIM X=9'-6"
LW PART NO. HL996158-002



L & W INDUSTRIES

THROW RODS

THROW RODS (STRAIGHT)

THROW ROD 1 1/4" X 42" LONG
NCLUDING PIN ASSEMBLY.
LW PART NO. HL996152-000

THROW ROD 1 1/4" X 65" LONG
NCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-000

THROW ROD 1 1/4" X 68" LONG
NCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-006

THROW ROD 1 1/4" X 70" LONG
NCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-007

THROW ROD 1 1/4" X 72" LONG
NCLUDING PIN ASSEMBLY.
LW PART NO. HL996152-001

THROW ROD 1 1/4" X 74" LONG
INCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-004

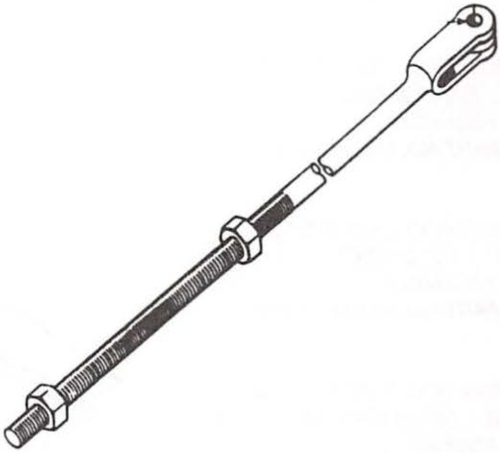
THROW ROD 1 1/4" X 78" LONG
INCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-003

THROW ROD 1 1/4" X 81" LONG
INCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-002

THROW ROD 1 1/4" X 84" LONG
INCLUDING PIN ASSEMBLY.
LW PART NO. HL996156-005

THROW ROD 1 1/4" X 108" LONG
INCLUDING PIN ASSEMBLY.
LW PART NO. HL996152-002

THROW ROD 1 1/4" X 144" LONG
INCLUDING PIN ASSEMBLY.
LW PART NO. HL996152-004



Throw Rods are shipped with a 7/8" x 2-1/2" pin assembly with nut, washer & cotter pin. Also included is the 1-1/4" nut kit.

THROW RODS

THROW RODS (OFFSET)

THROW ROD 1 1/4" X 71" LONG
WITH 1" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-005

THROW ROD 1 1/4" X 72" LONG
WITH 2 1/8" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-002

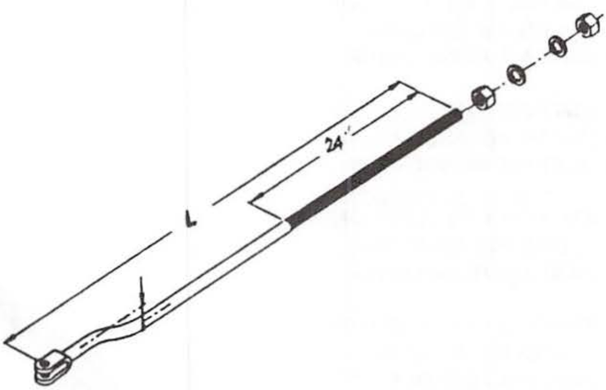
THROW ROD 1 1/4" X 72" LONG
WITH 2 3/4" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-004

THROW ROD 1 1/4" X 72" LONG
WITH 3 1/2" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-006

THROW ROD 1 1/4" X 74" LONG
WITH 1 7/8" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-007

THROW ROD 1 1/4" X 82" LONG
WITH 1 7/8" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-001

THROW ROD 1 1/4" X 98" LONG
WITH 1 7/8" OFFSET. INCLUDING
PIN ASSEMBLY.
LW PART NO. HL996145-000



LOCK RODS

LOCK RODS (STRAIGHT)

LOCK ROD 1 1/4" X 60" LONG
LW PART NO. HL996148-000

LOCK ROD 1 1/4" X 64 1/2" LONG
LW PART NO. HL996800-000

LOCK ROD 1 1/4" X 68" LONG
LW PART NO. HL996148-005

LOCK ROD 1 1/4" X 70" LONG
LW PART NO. HL996148-001

LOCK ROD 1 1/4" X 72" LONG
LW PART NO. HL996148-002

LOCK ROD 1 1/4" X 74" LONG
LW PART NO. HL996148-104

LOCK ROD 1 1/4" X 76" LONG
LW PART NO. HL996148-003

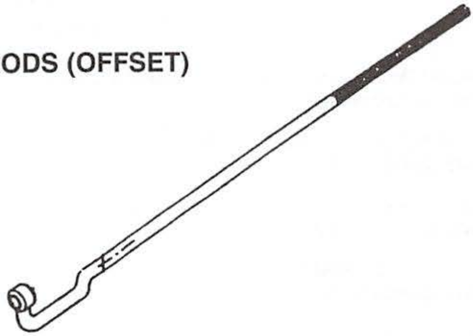
LOCK ROD 1 1/4" X 96" LONG
LW PART NO. HL996148-004

LOCK RODS (OFFSET)

LOCK ROD 1 1/4" X 58 1/4" LONG
WITH 3" OFFSET.
LW PART NO. HL996801-000

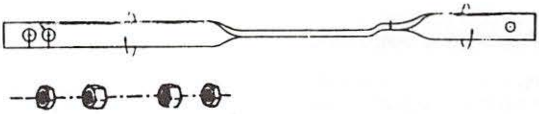
LOCK ROD 1 1/4" X 65 1/2" LONG
WITH 4" OFFSET.
LW PART NO. HL996801-001

LOCK ROD 1 1/4" X 61" LONG
WITH 4" OFFSET.
LW PART NO. HL996801-002



LOCK RODS (CONNECTING)

LOCK ROD, CONNECTING, FOR
FRONT SWIVEL ROD.
LW PART NO. HL061178-000



ALL LOCK RODS ARE SHIPPED WITH 1 1/4" NUT KITS.

POINT LUGS

POINT LUGS WITH TAPERED SHANKS

(2 1/2" WIDE FOR 1" TRACK BOLTS)

POINT LUG ASSEMBLY DIM X=15 3/4" DIM Y=8 7/8"
LW PART NO. HL996179-000

POINT LUG ASSEMBLY DIM X=18 1/2" DIM Y=11 5/8"
LW PART NO. HL996179-001

POINT LUG ASSEMBLY DIM X=21 1/4" DIM Y=14 5/8"
LW PART NO. HL996179-002

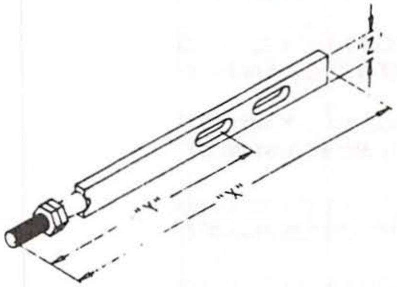
POINT LUG ASSEMBLY DIM X=24 1/4" DIM Y=17 5/8"
LW PART NO. HL996179-003

POINT LUG ASSEMBLY DIM X=17 1/8" DIM Y=10 1/4"
LW PART NO. HL996179-004

POINT LUG ASSEMBLY DIM X=19 7/8" DIM Y=13"
LW PART NO. HL996179-005

POINT LUG ASSEMBLY DIM X=22 3/4" DIM Y=15 7/8"
LW PART NO. HL996179-006

POINT LUG ASSEMBLY DIM X=21 1/2" DIM Y=13 5/8"
LW PART NO. HL996179-007



POINT LUGS WITH TAPERED SHANKS

(2" WIDE FOR 3/4" TRACK BOLTS)

POINT LUG ASSEMBLY DIM X=15 3/4" DIM Y=8 7/8"
LW PART NO. HL996014-000

POINT LUG ASSEMBLY DIM X=18 1/2" DIM Y=11 5/8"
LW PART NO. HL996014-001

POINT LUG ASSEMBLY DIM X=21 1/4" DIM Y=14 3/4"
LW PART NO. HL996014-002

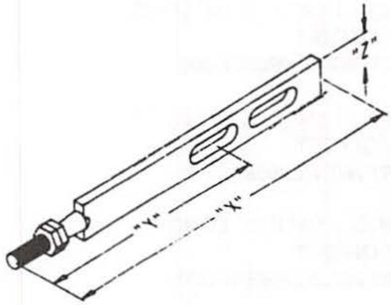
POINT LUG ASSEMBLY DIM X=24 1/4" DIM Y=17 3/8"
LW PART NO. HL996014-003

POINT LUG ASSEMBLY DIM X=17 1/8" DIM Y=10 1/4"
LW PART NO. HL996014-004

POINT LUG ASSEMBLY DIM X=19 7/8" DIM Y=13"
LW PART NO. HL996014-005

POINT LUG ASSEMBLY DIM X=22 3/4" DIM Y=15 7/8"
LW PART NO. HL996014-006

POINT LUG ASSEMBLY DIM X=21 1/2" DIM Y=13 5/8"
LW PART NO. HL996014-007

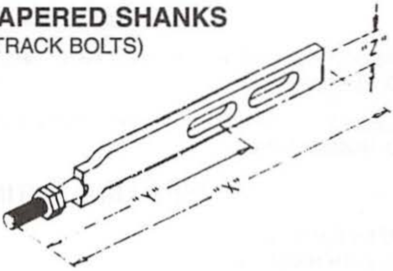


POINT LUGS ARE SHIPPED COMPLETELY ASSEMBLED WITH WASHER, SPRING NUT KIT, AND COTTER PIN.

POINT & DROP LUGS
POINT ROLLERS

POINT LUGS WITH TAPERED SHANKS

(2" WIDE FOR 1" TRACK BOLTS)

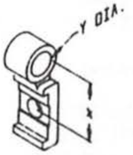


POINT LUG ASSEMBLY 17 7/8" LONG
LW PART NO. HL996169-000

POINT LUG ASSEMBLY 15 3/4" LONG
LW PART NO. HL996169-003

POINT LUG ASSEMBLY 19 7/8" LONG
LW PART NO. HL996169-004

DROP LUGS (FOR DETECTOR RODS)



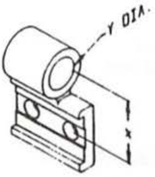
DROP LUG DIM X=2 1/2" DIM Y=25/32"
LW PART NO. HL031101-000

DROP LUG DIM X=4 1/2" DIM Y=25/32"
LW PART NO. HL031101-005

DROP LUG DIM X=4" DIM Y=25/32"
LW PART NO.HL031101-006

DROP LUG DIM X=2 1/2" DIM Y=25/32"
LW PART NO. HL031101-004

DROP LUGS (FOR LOCK RODS)



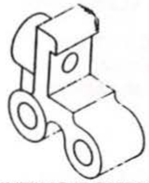
DROP LUG DIM X=3 1/2" DIM Y=1 1/32"
LW PART NO. HL031101-001

DROP LUG DIM X=5" DIM Y=1 1/32"
LW PART NO. HL031101-002

DROP LUG DIM X=2 1/2" DIM Y=1 1/32"
LW PART NO. HL031101-003

DROP LUG DIM X=4 1/4" DIM Y=1 5/16"
LW PART NO. HL031101-007

DROP LUG (FOR SPLIT LOCK ROD)



LW PART NO. HLSF-03

ALL DROP LUGS ARE SHIPPED COMPLETE WITH PROPER 3/4" MOUNTING BOLT KITS.

POINT ROLLERS

POINT ROLLER SET
LW PART NO. HLJMF-PR1
Std Pkg 2ea per set

HELPER ASSEMBLY- PIPE LINE FITTINGS CRANK STANDS - CRANKS - COMPENSATOR ARMS

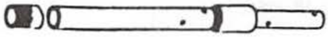
HELPER ASSEMBLIES

HELPER ASSEMBLY COMPLETE FOR RIGHT HAND OR LEFT HAND, 30' TURNOUT.
LW PART NO. HLSPHA30R(L)

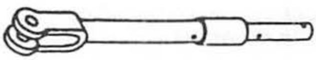
HELPER ASSEMBLY COMPLETE FOR RIGHT HAND OR LEFT HAND, 39' TURNOUT.
LW PART NO. HLSPHA39R(L)

PIPE LINE FITTINGS (HELPER ROD)

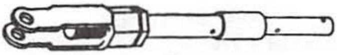
HELPER ROD PIPE 1" X 20", STEEL GALVANIZED. WITH RIVETS AND PIPE COUPLING.
LW PART NO. HL996019-000



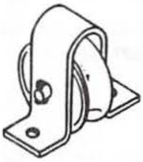
SOLID JAW ROD 1 1/4" TANGED END FOR 1" PIPE. COMPLETE WITH RIVETS AND PIPE COUPLING.
LW PART NO. HL996091-000



SCREW JAW ROD TANGED END FOR 1" PIPE. COMPLETE WITH SCREW JAW, JAM NUT, RIVETS, AND PIPE COUPLING.
LW PART NO. HL996008-000



PIPE STRAP CARRIER ONE WAY FOR 1" PIPE.
LW PART NO. HL4000-X

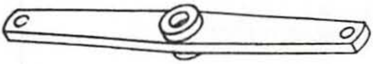


CRANK STANDS

CRANK STAND WITH PIN.
LW PART NO. HL996966-000

COMPENSATOR ARMS

COMPENSATOR STRAIGHT ARM
DIM X=11 3/4" DIM Y=11 3/4"
LW PART NO. HL996951-000

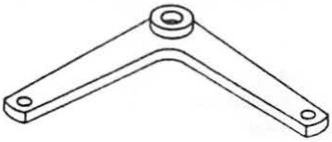


COMPENSATOR STRAIGHT ARM
DIM X=9" DIM Y=9"
LW PART NO. HL996950-000

CRANKS

CRANK, RIGHT ANGLE 11 3/4" X 11 3/4"
LW PART NO. HL996962-000

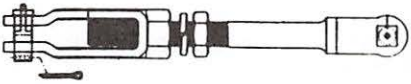
CRANK, RIGHT ANGLE 9" X 9"
LW PART NO. HL996963-000



PIPE LINE FITTINGS
ADJUSTABLE LINK - TIE STRAPS

ADJUSTABLE LINK

ADJUSTABLE LINK 16" TO 20" WITH SCREW JAW, CONNECTING PIN, AND HARDWARE.
LW PART NO. HL996874-000



TIE STRAPS (DROP TYPE)

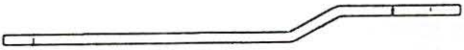
TIE STRAP 7" DROP 20" CENTERLINE OF HOLES.
LW PART NO. HL061222-000

TIE STRAP 7" DROP 19 1/2", 17", AND 5" CENTERLINE OF HOLES.
LW PART NO. HL061223-000

TIE STRAPS (OFFSET)

TIE STRAP 3/4" OFFSET. 20" CENTERLINE OF HOLES.
LW PART NO. HL061189-001

TIE STRAP 1 1/4" OFFSET. 20" CENTERLINE OF HOLES.
LW PART NO. HL091189-000

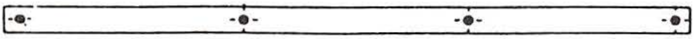


TIE STRAP 2 1/2" OFFSET. 19 1/2" AND 17 1/2" CENTERLINE OF HOLES.
LW PART NO. HL061194-000

TIE STRAPS (STRAIGHT)

TIE STRAP STRAIGHT 22" CENTERLINE OF HOLES.
LW PART NO. HL061192-001

TIE STRAP STRAIGHT 20" CENTERLINE OF HOLES.
LW PART NO. HL061192-000



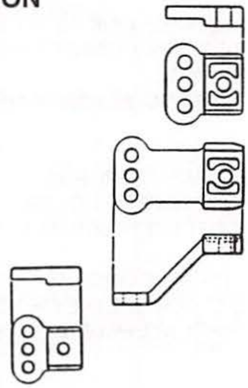
TIE STRAP STRAIGHT 22", 22" AND 20" CENTERLINE OF HOLES.
LW PART NO. HL061180-000

TIE STRAP STRAIGHT 19 1/2", 17" AND 5" CENTERLINE OF HOLES.
LW PART NO. HL061224-000

TIE STRAP STRAIGHT 20", 20", 22" 21", 20 1/2" CENTERLINE OF HOLES.
LW PART NO. HL061225-000

COUPLERS
TIE BOLT KITS

COUPLERS FOR THROW ROD CONNECTION



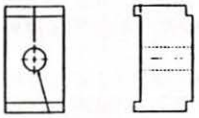
COUPLER STRAIGHT FOR MOUNTING THROW ROD TO GRS SWITCH MACHINE. MODEL 5A, 5B, 5D, 5E, 5F, 5G, AND 5H.
LW PART NO. HL001112-001

COUPLER OFFSET 3 1/2" FOR MOUNTING THROW ROD TO GRS SWITCH MACHINE. MODEL 5A, 5B, 5D, 5E, 5F, 5G, AND 5H.
LW PART NO. HL001194-001

COUPLER STRAIGHT FOR MOUNTING THROW ROD TO GRS SWITCH MACHINE, MODEL 6.
LW PART NO. HL001211-001

COUPLER STRAIGHT FOR MOUNTING THROW ROD TO U.S. & S. SWITCH MACHINE. MODEL M3, M22, AND M23.
LW PART NO. HL001143-001

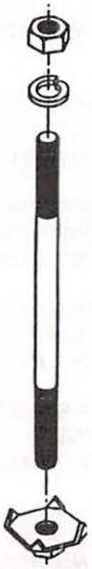
COUPLER SHIMS



1" COUPLER SHIM FOR GRS SWITCH MACHINE. MODEL 5A, 5B, 5D, 5E, 5F, 5G, AND 5H.
LW PART NO. HL071849-001

1" COUPLER SHIM FOR U.S. & S. SWITCH MACHINE. MODEL M3, M22, AND M23.
LW PART NO. HL071848-001

TIE BOLT KITS WITH GRIP NUTS



TIE BOLT KIT COMPLETE WITH ALL HARDWARE. 3/4" DIA. WITH 3" THREAD EACH END.

LENGTH	*LW PART NO.*
11" LONG	***HL031133-000***
12" LONG	***HL031133-004***
13" LONG	***HL031133-003***
16" LONG	***HL031133-001***
17" LONG	***HL031133-002***

TIE BOLT KIT COMPLETE WITH ALL HARDWARE. 7/8" DIA. WITH 3" THREAD EACH END.

LENGTH	*LW PART NO.*
11" LONG	***HL031024-000***
12" LONG	***HL031024-004***
13" LONG	***HL031024-003***
16" LONG	***HL031024-001***
17" LONG	***HL031024-002***

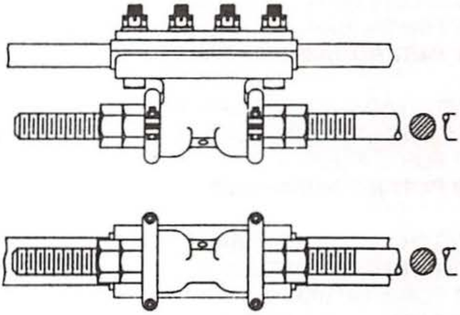
ADJUSTMENT BASKET ASSEMBLIES

VERTICAL ADJUSTMENT BASKETS

SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 3/4" BAR.
LW PART NO. HL996122-000

SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 1" BAR.
LW PART NO. HL996122-001

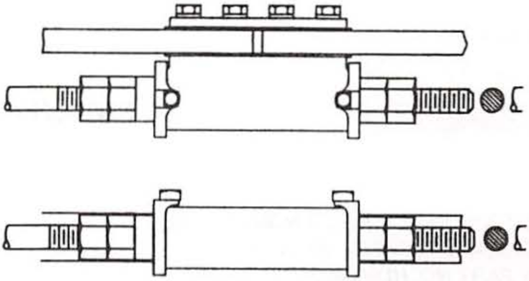
SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 1 1/4" BAR.
LW PART NO. HL996122-002



SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 3/4" BAR.
LW PART NO. HL996989-000

SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 1" BAR.
LW PART NO. HL996989-001

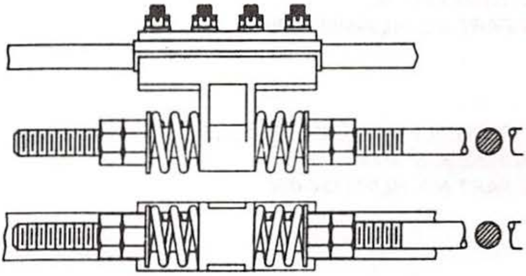
SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 1 1/4" BAR.
LW PART NO. HL996989-002



SWITCH ADJUSTMENT BASKET
COMPLETE WITH EXTERNAL
COMPRESSION SPRINGS AND
INSULATION KIT FOR 3/4" BAR.
LW PART NO. HL996221-000

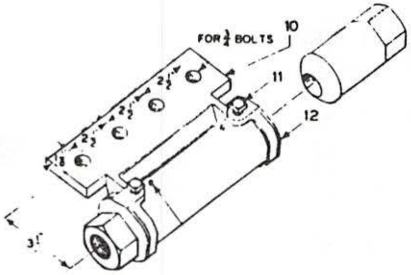
SWITCH ADJUSTMENT BASKET
COMPLETE WITH EXTERNAL
COMPRESSION SPRINGS AND
INSULATION KIT FOR 1" BAR.
LW PART NO. HL996221-001

SWITCH ADJUSTMENT BASKET
COMPLETE WITH EXTERNAL
COMPRESSION SPRINGS AND
INSULATION KIT FOR 1 1/4" BAR.
LW PART NO. HL996221-002



ADJUSTMENT BASKETS
SWITCH PLATES

HORIZONTAL ADJUSTMENT BASKETS

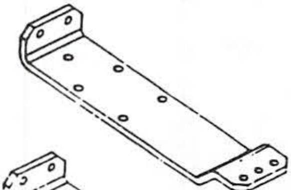


SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 3/4" BAR.
LW PART NO. HL996123-000

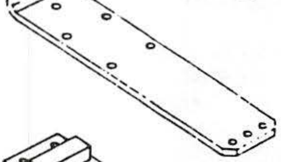
SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 1" BAR.
LW PART NO. HL996123-001

SWITCH ADJUSTMENT BASKET
COMPLETE WITH INSULATION
KIT FOR 1 1/4" BAR.
LW PART NO. HL996123-002

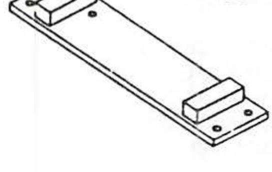
SWITCH PLATES



EXTENSION PLATE FOR NON DAPPED
TIE WITH 2" OFFSET, 30" LONG.
LW PART NO. HL996803



EXTENSION PLATE FOR DAPPED
TIE, STRAIGHT NO OFFSET.
LW PART NO. HL996802-000

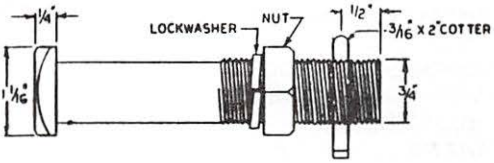


EXTENSION PLATE FOR GRS SWITCH
MACHINES, 8" X 24".
LW PART NO. HL051124-000

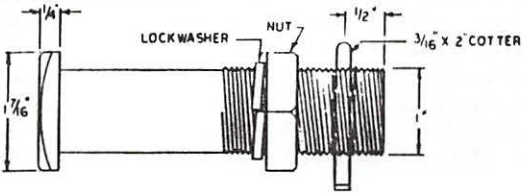
POINT LUG BOLT KITS
VERTICAL OPERATING RODS

1" POINT LUG BOLT KITS

POINT LUG BOLT KIT	
1" - 8" X 4"	*LW PART NO. HL8820-X*
1" - 8" X 4 1/2"	*LW PART NO. HL8820-1X*
1" - 8" X 5"	*LW PART NO. HL8821-X*
1" - 8" X 5 1/2"	*LW PART NO. HL8821-1X*
1" - 8" X 6"	*LW PART NO. HL8822-X*
1" - 8" X 6 1/2"	*LW PART NO. HL8822-1X*


1/4"
LOCKWASHER
NUT
1/2"
3/16" X 2" COTTER
1 1/16"
3/4"

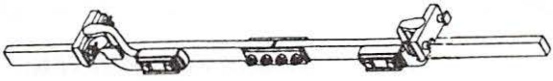
3/4" POINT LUG BOLT KITS


1/4"
LOCKWASHER
NUT
1/2"
3/16" X 2" COTTER
1 7/16"
1"

POINT LUG BOLT KIT	
3/4" - 10" X 4"	*LW PART NO. HL8810-X*
3/4" - 10" X 5"	*LW PART NO. HL8811-X*
3/4" - 10" X 5 1/2"	*LW PART NO. HL8811-1X*
3/4" - 10" X 6"	*LW PART NO. HL8812-X*
3/4" - 10" X 6 1/2"	*LW PART NO. HL8812-1X*

VERTICAL OPERATING RODS

VERTICAL OPERATING ROD ASSEMBLY, INSULATED. COMPLETE WITH MOUNTING BOLTS.
LW PART NO. HL996861-000



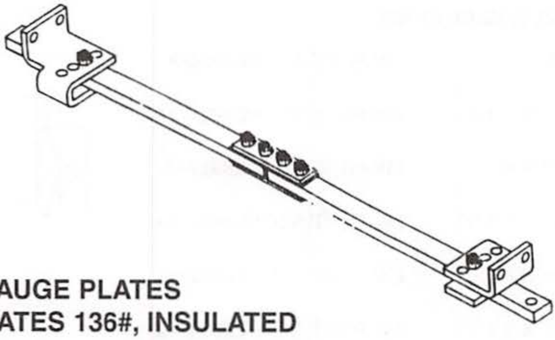
VERTICAL OPERATING ROD ASSEMBLY, INSULATED WITH TWISTED END. COMPLETE WITH MOUNTING BOLTS.
LW PART NO. HL96861-100

HORIZONTAL SWITCH RODS
GAUGE PLATES

HORIZONTAL SWITCH RODS

HORIZONTAL SWITCH ROD
ASSEMBLY INSULATED
AND ADJUSTABLE.
LW PART NO. HL996230-000

HORIZONTAL SWITCH ROD
ASSEMBLY NON-INSULATED
AND ADJUSTABLE.
LW PART NO. HL996230-100



GAUGE PLATES
GAUGE PLATES 136#, INSULATED

GAUGE PLATE, #01	***LW PART NO. HLGP136-01***
GAUGE PLATE, #1, POINT LENGTH 16' 6"	***LW PART NO. HLGP136-1-16-6***
GAUGE PLATE, #1, POINT LENGTH 24'	***LW PART NO. HLGP136-1-24***
GAUGE PLATE, #1, POINT LENGTH 30'	***LW PART NO. HLGP136-1-30***
GAUGE PLATE, #1, POINT LENGTH 39'	***LW PART NO. HLGP136-1-39***
GAUGE PLATE, #2, POINT LENGTH 16' 6"	***LW PART NO. HLGP136-2-16-6***
GAUGE PLATE, #2, POINT LENGTH 24'	***LW PART NO. HLGP136-2-24***
GAUGE PLATE, #2, POINT LENGTH 30'	***LW PART NO. HLGP136-2-30***
GAUGE PLATE, #2, POINT LENGTH 39'	***LW PART NO. HLGP136-2-39***

GAUGE PLATES 119#, INSULATED

GAUGE PLATE, #01	***LW PART NO. HLGP119-01***
GAUGE PLATE, #1, POINT LENGTH 16' 6"	***LW PART NO. HLGP119-1-16-6***
GAUGE PLATE, #1, POINT LENGTH 24'	***LW PART NO. HLGP119-1-24***
GAUGE PLATE, #1, POINT LENGTH 30'	***LW PART NO. HLGP119-1-30***
GAUGE PLATE, #1, POINT LENGTH 39'	***LW PART NO. HLGP119-1-39***
GAUGE PLATE, #2, POINT LENGTH 16' 6"	***LW PART NO. HLGP119-2-16-6***
GAUGE PLATE, #2, POINT LENGTH 24'	***LW PART NO. HLGP119-2-24***
GAUGE PLATE, #2, POINT LENGTH 30'	***LW PART NO. HLGP119-2-30***
GAUGE PLATE, #2, POINT LENGTH 39'	***LW PART NO. HLGP119-2-39***

GAUGE PLATE EXTENSIONS

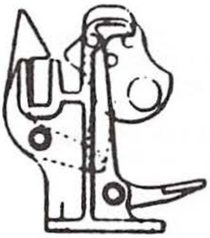
GAUGE PLATE POWER EXTENSION.
LW PART NO. HLGPE-1

GAUGE PLATE BOLT EXTENSION ASSEMBLY.
LW PART NO. HLGP-30A

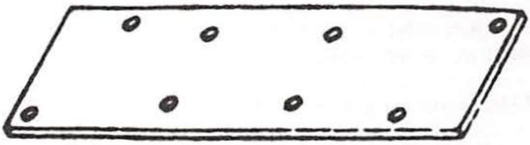
LATCH STANDS

LATCH STANDS

LATCH STAND FOR GRS SWITCH
MACHINES.
LW PART NO. HL



LATCH STAND PLATE FOR GRS
SWITCH MACHINES.
LW PART NO. HL

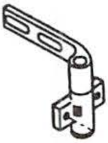


SWITCH LAYOUTS
REPLACEMENT PARTS

SWIVEL LUGS

RIGHT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG WITH 4 1/4" DROP.
LW PART NO. HL991102-011

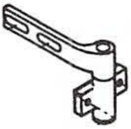
RIGHT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG WITH 5 3/16" DROP.
LW PART NO. HL991102-021



RIGHT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG WITH 4 1/4" DROP.
LW PART NO. HL991102-121

RIGHT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG WITH 5 3/16" DROP.
LW PART NO. HL991102-111

LEFT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG WITH 4 1/4" DROP.
LW PART NO. HL991192-011

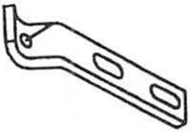


LEFT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG WITH 5 3/16" DROP.
LW PART NO. HL991192-021

LEFT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG WITH 4 1/4" DROP.
L&W PART NO. HL991192-121

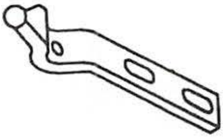
LEFT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG WITH 5 3/16" DROP.
L&W PART NO. HL991192-111

SWIVEL LUG WITHOUT BALL END. DIM Y=3 1/2"
LW PART NO. HL001152-000



SWIVEL LUG WITHOUT BALL END. DIM Y=4 1/2"
LW PART NO. HL001152-001

SWIVEL LUG WITHOUT BALL END. DIM Y=6 1/2"
LW PART NO. HL001152-002



SWIVEL LUG WITH BALL END. DIM Y=3 1/2"
LW PART NO. HL001154-001

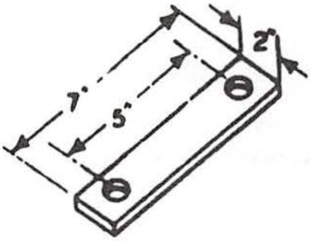
SWIVEL LUG WITH BALL END. DIM Y=4 1/2"
LW PART NO. HL001154-002

SWIVEL LUG WITH BALL END. DIM Y=6 1/2"
LW PART NO. HL001154-003

SWITCH LAYOUTS
REPLACEMENT PARTS

WASHER PLATES

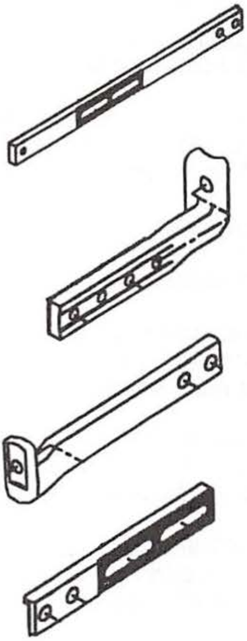
WASHER PLATE 1/8" THICK STEEL 5" BOLT CENTERS FOR 3/4" BOLTS. FOR MOUNTING SWIVEL LUG TO TRANSIT BAR.
LW PART NO. HL061144-000



WASHER PLATE 1/4" THICK STEEL 5" BOLT CENTERS FOR 3/4" BOLTS. FOR MOUNTING FRONT ROD OR POINT LUGS.
LW PART NO. HL051148-000

WASHER PLATE 1/4" THICK STEEL 5" BOLT CENTERS FOR 1" BOLTS. FOR MOUNTING FRONT ROD OR POINT LUGS.
LW PART NO. HL051147-000

TRANSIT BARS



TRANSIT BAR FOR SWIVEL FRONT ROD. 1" THICK X 36" LONG.
LW PART NO. HL071883-000

TRANSIT SWIVEL BAR LEFT HAND WITH 2 1/2" DROP.
LW PART NO. HL001156-101

TRANSIT SWIVEL BAR LEFT HAND WITH 4 3/8" DROP.
LW PART NO. HL001156-102

TRANSIT SWIVEL BAR RIGHT HAND WITH 2 1/2" DROP.
LW PART NO. HL001155-101

TRANSIT SWIVEL BAR RIGHT HAND WITH 4 3/8" DROP.
LW PART NO. HL001155-102

TRANSIT BAR, CONNECTING.
LW PART NO. HL071768-000

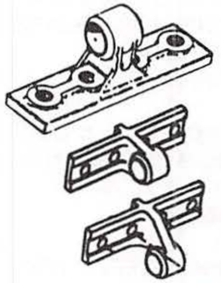
SWITCH LAYOUTS REPLACEMENT PARTS

CENTER LUGS

CENTER LUG, NO OFFSET
LW PART NO. HL001176-001

CENTER LUG, NO OFFSET
LW PART NO. HL001159-101

CENTER LUG, WITH OFFSET
LW PART NO. HL001159-102



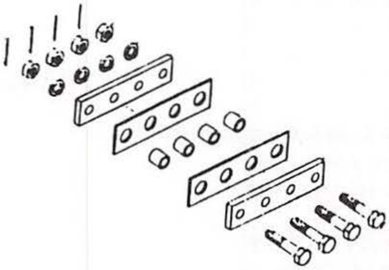
INSULATION KITS

INSULATION KIT FOR CONTROLLER ROD
LW PART NO. HL031188-000

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET OR CENTER LUG 3/4" TRANSIT BAR
LW PART NO. HL031189-000

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET OR CENTER LUG 1" TRANSIT BAR
LW PART NO. HL031189-001

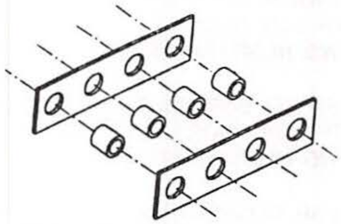
INSULATION KIT, VERTICAL ADJUSTMENT
BASKET OR CENTER LUG 1 1/4" TRANSIT BAR
LW PART NO. HL031189-002



INSULATION KIT, VERTICAL ADJUSTMENT
BASKET. 3/4" X 2 1/2" TRANSIT BAR
LW PART NO. HL031088-000

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET. 1" X 2 1/2" TRANSIT BAR
LW PART NO. HL031088-001

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET. 1 1/4" X 2 1/2" TRANSIT BAR
LW PART NO. HL031088-002



SWITCH LAYOUTS
REPLACEMENT PARTS

INSULATION KITS

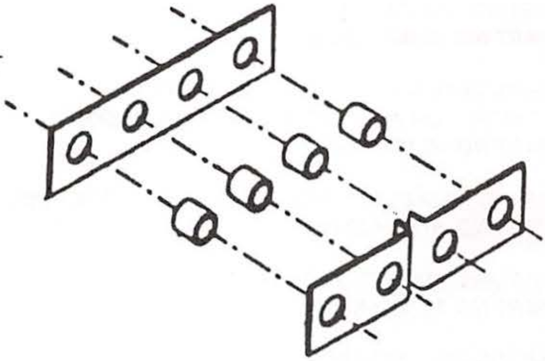
INSULATION KIT, HORIZONTAL ADJUSTMENT
BASKET. 3/4" TRANSIT BAR
LW PART NO. HL031080-000

INSULATION KIT, HORIZONTAL ADJUSTMENT
BASKET. 1" TRANSIT BAR
LW PART NO. HL031080-001

INSULATION KIT, HORIZONTAL ADJUSTMENT
BASKET. 1 1/4" TRANSIT BAR
LW PART NO. HL031080-002

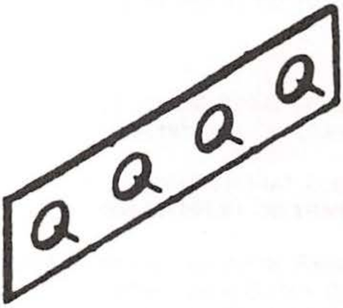
INSULATION KIT, 3/4" TRANSIT BAR OR
GAUGE ROD
LW PART NO. HL031098-002

INSULATION KIT, 1" TRANSIT BAR OR
GAUGE ROD
LW PART NO. HL031098-001



INSULATION KIT, 1 1/4" TRANSIT BAR OR
GAUGE RODINSULATION PLATE, 2 1/2" BOLT CENTERS
FOR 3/4" BOLT. 1/8" THICK
LW PART NO. HL194101-000

INSULATOR BUSHING FOR 3/4" BOLT.
31/32" LONG FOR 3/4" TRANSIT BAR
LW PART NO. HL024109-002



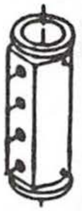
INSULATOR BUSHING FOR 3/4" BOLT.
1 7/32" LONG FOR 1" TRANSIT BAR
LW PART NO. HL024109-000

INSULATOR BUSHING FOR 3/4" BOLT.
1 15/32" LONG FOR 1 1/4" TRANSIT BAR
LW PART NO. HL024109-001

PLATE, CONNECTOR 1/2" STEEL.
2 1/2" BOLT CENTERS FOR 3/4" BOLT
LW PART NO. HL061141-000

SWITCH LAYOUTS
REPLACEMENT PARTS

ADJUSTMENT BASKETS



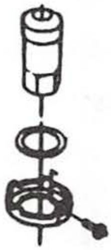
ADJUSTMENT BASKET BODY, VERTICAL
LW PART NO. HL001187-001

ADJUSTMENT BASKET BODY, HORIZONTAL
LW PART NO. HL001184-001

ADJUSTING NUT CASTING 1 1/4" - 7 THREAD
LW PART NO. HL001185-001

WASHER, RETAINING 2 7/16" I.D. X 3 1/4" O.D.
5/64" THICK. FOR ALL TYPE ADJUSTMENT BASKETS
LW PART NO. HL108197-000

RETAINING BASKET KIT (INCLUDES MOUNTING SCREW)
LW PART NO. HL071922-000



ADJUSTMENT BASKET BODY, VERTICAL
LW PART NO. HL001140-001

RETAINING RING WITH BOLT KIT
LW PART NO. HL001149-001

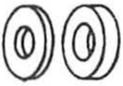
ADJUSTING NUT CASTING 1 1/4" - 7 THREAD
LW PART NO. HL001165-003

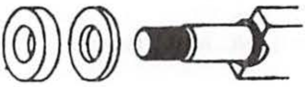
POINT LUGS

WASHER, TAPER SHANK, FOR SPRING
LW PART NO. HL071814-000

SPRING, TAPER SHANK
LW PART NO. HL105118-000

WASHER, STRAIGHT SHANK, STEEL
2" O.D. x 1" I.D. X 1/4" THICK
LW PART NO. HL071094-000





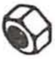
WASHER, STRAIGHT SHANK, STEEL
2" O.D. X .890" I.D. X 1/4" THICK
LW PART NO. HL071094-001

WASHER, STRAIGHT SHANK, RUBBER.
2 1/4" O.D. X 1" I.D. X 1/2" THICK
LW PART NO. HL103103-000

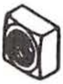
SWITCH LAYOUTS
REPLACEMENT PARTS

HARDWARE

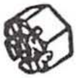
NUT, HEAVY HEX
3/4" - 10
LW PART NO. KD96223



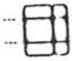
NUT, HEAVY SQUARE
3/4" -10
LW PART NO. KD96222



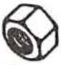
NUT, SLOTTED HEAVY HEX
3/4" -10
LW PART NO. KD9444S



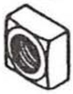
NUT, HEAVY HEX JAM
1" - 8 X 9/16" THICK
LW PART NO. KD96129



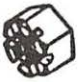
NUT, HEAVY HEX
1" - 8
LW PART NO. KD96183



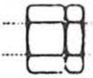
NUT, HEAVY SQUARE
1" - 8
LW PART NO. KD96225



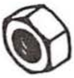
NUT, SLOTTED HEAVY HEX
1" -8
LW PART NO. KD9446S



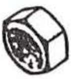
NUT, HEAVY HEX JAM
1 1/4" -7 X 11/16" THICK
LW PART NO. KD96131



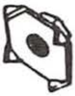
NUT, HEAVY HEX
1 1/4" - 7
LW PART NO. KD96123



NUT, CUPPED HEAVY HEX
1 1/4" -7
LW PART NO. HL071126-000



GRIP NUT 3/4" - 10
LW PART NO. HL051905-000

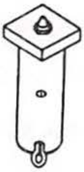


GRIP NUT 7/8" -9
LW PART NO. HL031024-002

SWITCH LAYOUTS
REPLACEMENT PARTS

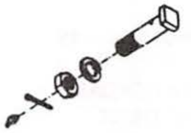
CONNECTOR PINS

CONNECTOR PIN 7/8" X 2 1/4" LONG
WITH COTTER PIN AND GREASE FITTING
LW PART NO. HL996124-000



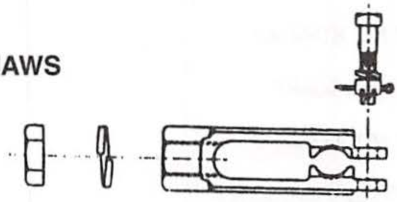
CONNECTOR PIN 7/8" X 2 1/2" LONG
WITH COTTER PIN AND GREASE FITTING
LW PART NO. HL996124-001

CONNECTOR PIN (THREADED) 7/8" X
2 1/2" LONG. WITH COTTER PIN, LOCK
WASHER, NUT, AND GREASE FITTING
LW PART NO. HL996015-000



CONNECTOR PIN (THREADED) 7/8" X
2 3/4" LONG. WITH COTTER PIN, LOCK
WASHER, NUT, AND GREASE FITTING
LW PART NO. HL996015-001

SCREW JAWS

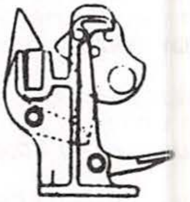


SCREW JAW 1 1/4" - 7 THREAD
LW PART NO. HL001196-001

SCREW JAW KIT 1" - 8 THREAD
LW PART NO. HL031141-000

LEVER LATCH STAND

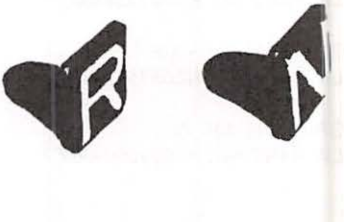
UNIVERSAL LEVER LATCH STAND
LW PART NO. HLSF-01



SWITCH LEVER LETTERS

LETTER "N"
LW PART NO. HLSF-08

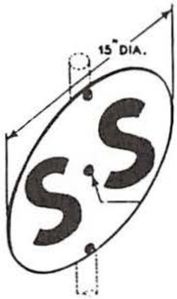
LETTER "R"
LW PART NO. HLSF-09

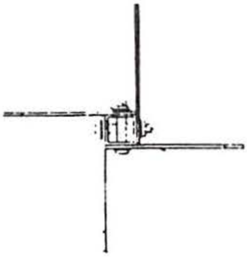


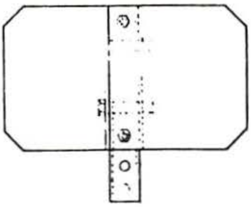
SWITCH LAYOUTS
REPLACEMENT PARTS

SIGNS

SPRING SWITCH MARKER SIGN
DOUBLE FACED, BLACK LETTERS
ON SILVER REFLECTIVE TAPE
LW PART NO. 7A1200







NOTE PAGE

SWITCH MACHINES

M23-A & M23-B SWITCH MACHINE PARTS

M3, M23-A, & M23-B CIRCUIT CONTROLLER

M23-A & M23-B GEAR BOX PARTS

DA-10 AIR MACHINE PARTS

NA-15 AIR MACHINE PARTS

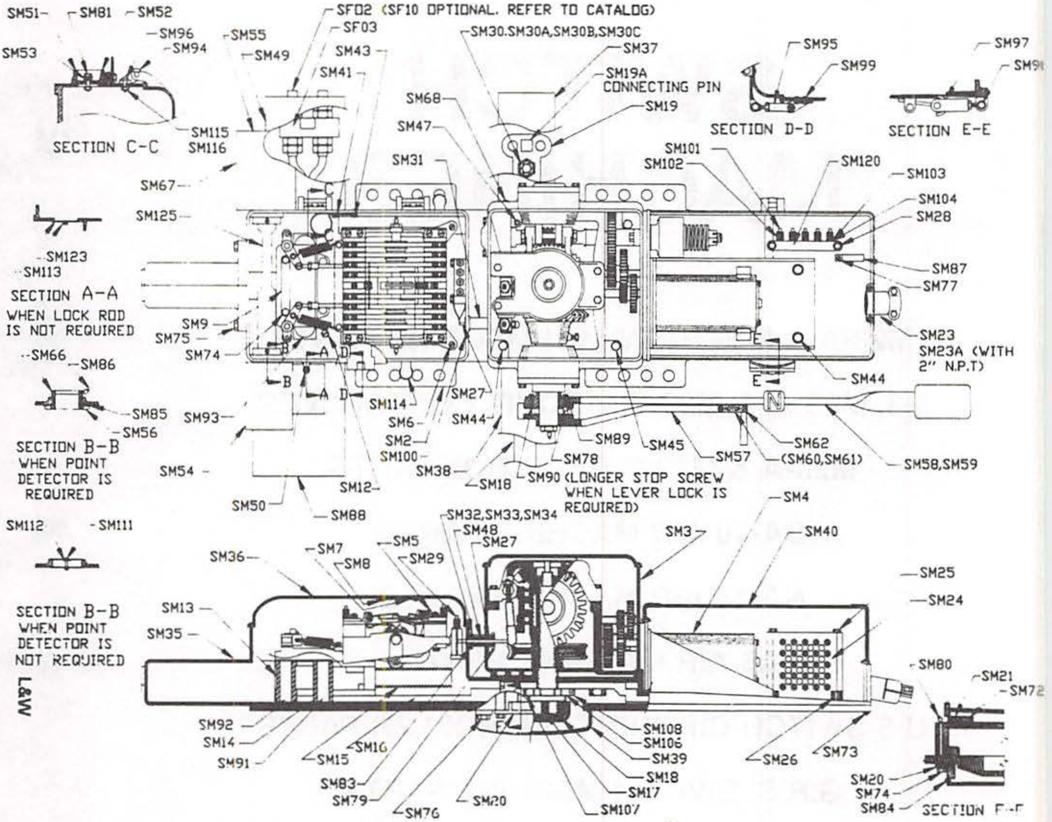
A5 AIR MACHINE PARTS

U-5 SWITCH CIRCUIT CONTROLLER PARTS

G.R.S. SWITCH MACHINE PARTS

7J & 7K CIRCUIT CONTROLLER PARTS

M23-A AND M23-B SWITCH MACHINE PARTS


SM51-
SM81
SM52
SM96
SM94
SM55
SM49
SM53
SF02 (SF10 OPTIONAL. REFER TO CATALOG)
SF03
SM43
SM41
SM30.SM30A,SM30B,SM30C
SM37
SM19A
CONNECTING PIN
SM19
SM68
SM47
SM31
SM95
SM99
SECTION D-D
SM97
SM9
SECTION E-E
SM115
SM116
SECTION C-C
SM67
SM125
SM101
SM102
SM120
SM103
SM104
SM28
SM87
SM77
SM23
SM23A (WITH 2" N.P.T)
SM44
SM123
SM113
SECTION A-A
WHEN LOCK ROD IS NOT REQUIRED
SM9
SM75
SM74
SM66
SM86
SM85
SM56
SECTION B-B
WHEN POINT DETECTOR IS REQUIRED
SM93
SM54
SM50
SM88
SM12
SM114
SM6
SM2
SM100
SM27
SM44
SM38
SM18
SM89
SM78
SM90 (LONGER STOP SCREW WHEN LEVER LOCK IS REQUIRED)
SM45
SM57
SM62
(SM60,SM61)
SM58,SM59
A
B
C
D
E
N
SM112
SM111
SECTION B-B
WHEN POINT DETECTOR IS NOT REQUIRED
L&W
SM32,SM33,SM34
SM48
SM27
SM5
SM7
SM8
SM29
SM36
SM13
SM35
SM3
SM4
SM40
SM25
SM24
SM80
SM21
SM72
SM92
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SM16
SM83
SM79
SM76
SM20
SM108
SM106
SM39
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SM107
SM26
SM73
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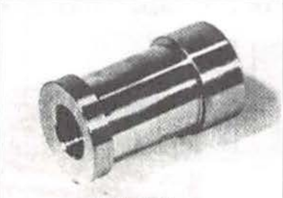
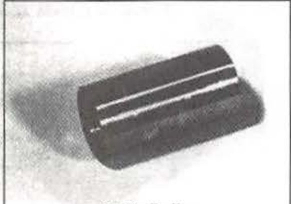
SM74
SM84
SECTION F-F

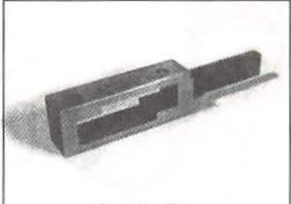
REPLACEMENT PARTS M23-A & M23-B SWITCH MACHINE- SINGLE SWITCH ASBLY



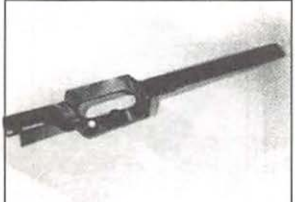
Guide Roller
Item #13 “J” Mfg. #SM-13



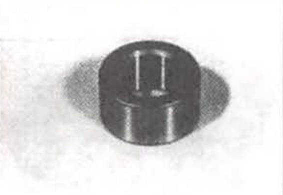
Guide Roller
Item #14 “J” Mfg. #SM-14



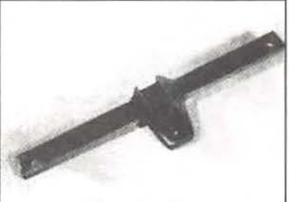
Locking Bar
Item #15 “J” Mfg. #SM-15



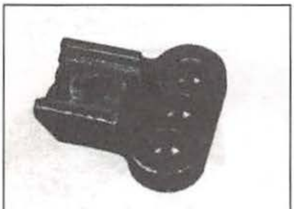
Slide Bar CAM (Inc. Studs & Roller)
Item #16 “J” Mfg. #SM-16



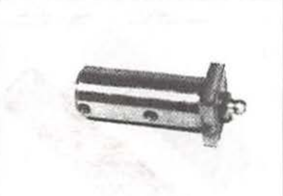
Operation Roller
Item #17 “J” Mfg. #SM-17



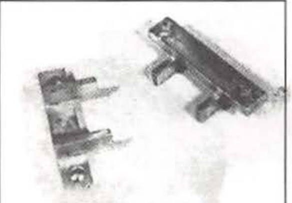
Operating Bar
Item #18 “J” Mfg. #SM-18



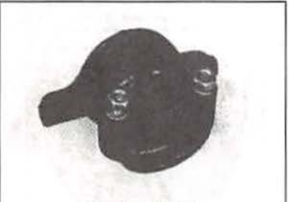
Operating Bar Lug
Item #19 “J” Mfg. #SM-19



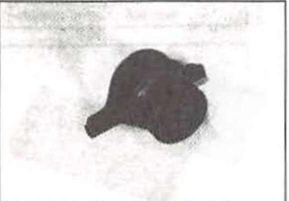
Connecting Pin
Item #19A “J” Mfg. #SM-19A



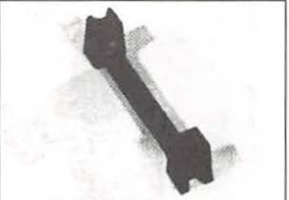
Wearing Bracket
Item #20 “J” Mfg. #SM-20



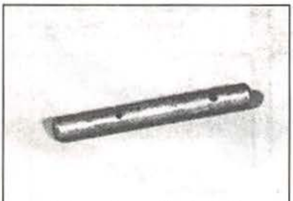
Conduit Outlet
Item #23 “J” Mfg. #SM-23



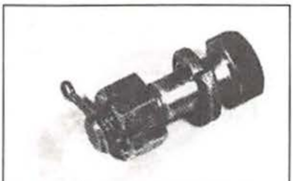
Conduit Liquid Tite Outlet (New Design)*
Item #23A “J” Mfg. #SM-23A



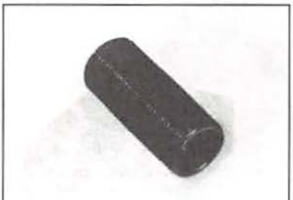
Terminal Board Support
Item #26 “J” Mfg. #SM-26



Motor Cutout Push Rod
Item #27 “J” Mfg. #SM-27

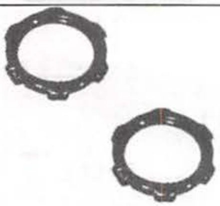


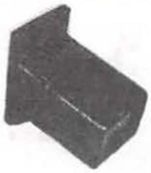
Bar Lug Bolt - 7/8 9" x 3" HX, HD, Comp.
w/ Lock Washer, Slotted Nut & Kotter Pin
Item #30 “J” Mfg. #SM-30

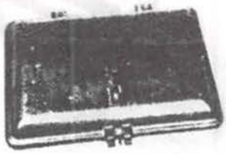


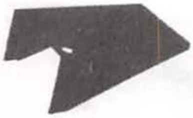
Pipe Nipple
Item #31 “J” Mfg. #SM-31

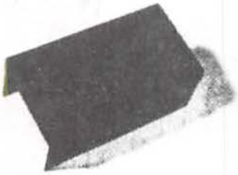
REPLACEMENT PARTS M23-A & M23-B SWITCH MACHINE- SINGLE SWITCH ASBLY

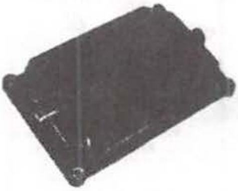

Lock Nut
Item #34 Mfg. #SM-34

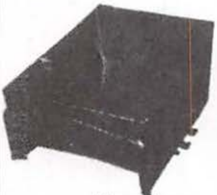

Slide Bar Cover
Item #35 Mfg. #SM-35

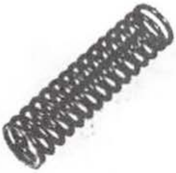

Circuit Controller Cover
Item #36 Mfg. #SM-36

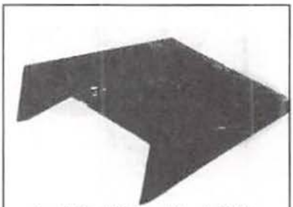

Operating Bar Cover (Track Side)
Item #37 Mfg. #SM-37

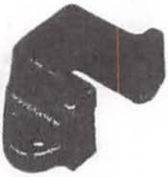

Operating Bar Cover (Field Side)
Item #38 Mfg. #SM-38


Crank Case Cover
Item #39 Mfg. #SM-39


Motor Cover
Item #40 Mfg. #SM-40


Motor Cutout Push Rod Spring
Item #48 Mfg. #SM-48


Lock Rod Cover (Track Side)
Item #49 Mfg. #SM-49


Lock Rod Cover Scraper
Item #51 Mfg. #SM-51

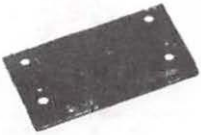
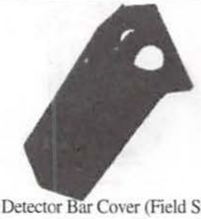
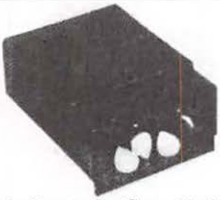
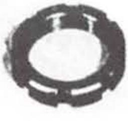
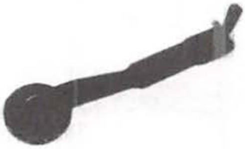


Plate
Item #52 Mfg. #SM-52

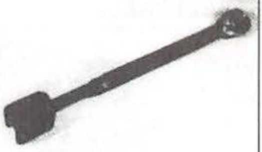

Point Detector Bar Cover (Field Side)
Item #54 Mfg. #SM-54

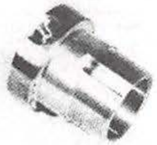

Point Detector Bar Cover (Track Side)
Item #55 Mfg. #SM-55

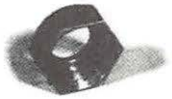

Lock Nut
Item #56 Mfg. #SM-56

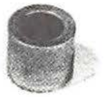

Selector Lever
Item #57 Mfg. #SM-57

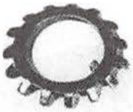
REPLACEMENT PARTS M23-A & M23-B SWITCH MACHINE- SINGLE SWITCH ASBLY

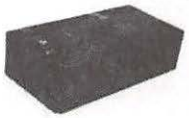

Hand-Throw Lever
Item #58 Mfg. #SM-58

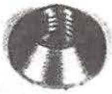

Bushing, Point Detector
Item #66 Mfg. #SM-66

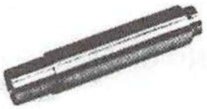

Bushing
Item #79 Mfg. #SM-79

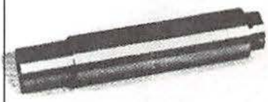

Bushing
Item #83 Mfg. #SM-83

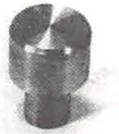

Lock Washer
Item #85 Mfg. #SM-85

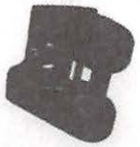

Long Closed Lock Rod Cover - Field Side
Item #88 Mfg. #SM-88

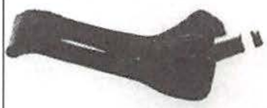

Beveled Washer
Item #88B Mfg. #SM-88B

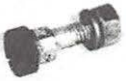

Stud
Item #91 Mfg. #SM-91

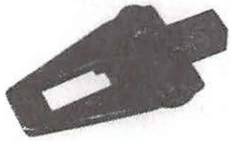

Stud
Item #92 Mfg. #SM-92

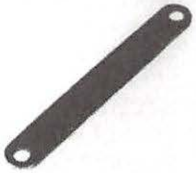

Lock Rod Support
Item #93 Mfg. #SM-93


Hinge Lug
Item #94 Mfg. #SM-94

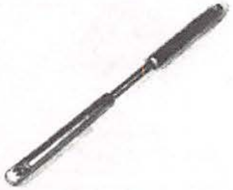

Adjustable Hasp
Item #95 Mfg. #SM-95

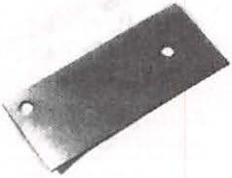

Eccentric Stud
Item #96 Mfg. #SM-96

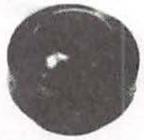

Hasp
Item #97 Mfg. #SM-97

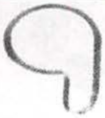

Strap
Item #120 Mfg. #SM-120

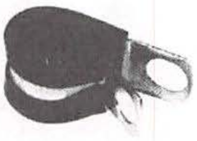
REPLACEMENT PARTS FOR M23-A AND M23-B SWITCH MACHINE FOR SINGLE SWITCH ASSEMBLY


Point Detector Bar
Item #125 "J" Mfg. #SM-125


Motor Cut Out Insulation Board
Item #138 "J" Mfg. #SM-138


Motor Cut Out Terminal Post Cap
Item #139 "J" Mfg. #SM-139


Motor Cut Out Terminal Post
Insulation Tube
Item #140 "J" Mfg. #SM-140


Circuit Controller Wire Harness
Grommet
Item #140-A "J" Mfg. #SM-140-A

PARTS LIST AND ORDERING REFERENCE

ITEM NO.	DESCRIPTION	LW PART NO
13	GUIDE ROLLER	*HGSM-13*
14	GUIDE ROLLER	*HGSM-14*
15	LOCKING BAR	*HGSM-15*
16	SLIDE BAR CAM (INCLUDING STUDS & ROLLER)	*HGSM-16*
17	OPERATION ROLLER	*HGSM-17*
18	OPERATION BAR	*HGSM-18*
19	OPERATION BAR LUG	*HGSM-19*
19A	CONNECTION PIN	*HGSM-19A*
20	WEARING BRACKET	*HGSM-20*
23	CONDUIT OUTLET	*HGSM-23*
23A	CONDUIT LIQUID TIGHT OUTLET (NEW DESIGN)	*HGSM-23A*
26	TERMINAL BOARD SUPPORT	*HGSM-26*
27	MOTOR CUTOUT PUSH ROD	*HGSM-27*
30	BAR LUG BOLT -7/8" - 9 X 3" HEX HEAD WITH LOCK WASHER, SLOTTED NUT & COTTER PIN	*HGSM-30*
31	PIPE NIPPLE	*HGSM-31*
34	LOCK NUT	*HGSM-34*
35	SLIDE BAR COVER	*HGSM-35*
36	CIRCUIT CONTROLLER COVER	*HGSM-36*
37	OPERATING BAR COVER	*HGSM-37*
38	OPERATING BAR COVER	*HGSM-38*
39	CRANK CASE COVER	*HGSM-39*

L & W INDUSTRIES

REPLACEMENT PARTS FOR M23-A AND M23-B SWITCH MACHINE FOR SINGLE SWITCH ASSEMBLY

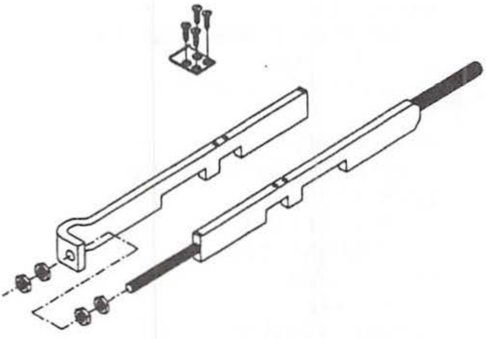
PARTS LIST AND ORDERING REFERENCE (CONT)

ITEM NO.	DESCRIPTION	*LW PART NO*
40	MOTOR COVER	***HGSM-40***
48	MOTOR CUTOUT PUSH ROD SPRING	***HGSM-48***
49	LOCK ROD COVER	***HGSM-49***
51	LOCK ROD COVER SCRAPER	***HGSM-51***
52	PLATE	***HGSM-52***
54	POINT DETECTOR BAR COVER	***HGSM-54***
55	POINT DETECTOR BAR COVER	***HGSM-55***
56	LOCK NUT	***HGSM-56***
57	SELECTOR LEVER	***HGSM-57***
58	HAND THROW LEVER	***HGSM-58***
60	MOTOR PLATE	***HGSM-60***
61	HAND PLATE	***HGSM-61***
66	BUSHING, POINT DETECTOR	***HGSM-66***
67	COVER PLATE	***HGSM-67***
79	BUSHING	***HGSM-79-B***
83	BUSHING	***HGSM-83-B***
85	LOCK WASHER	***HGSM-85***
88A	LONG CLOSED LOCK ROD COVER - TRACK SIDE	***HGSM-88A***
88	LONG CLOSED LOCK ROD COVER - FIELD SIDE	***HGSM-88***
88B	BEVELED WASHER	***HGSM-88B***
91	STUD	***HGSM-91***
92	STUD	***HGSM-92***
93	LOCK ROD SUPPORT	***HGSM-93***
94	HINGE LUG	***HGSM-94***
95	ADJUSTABLE HASP	***HGSM-95***
96	ECCENTRIC STUD	***HGSM-96***
97	HASP	***HGSM-97***
120	STRAP	***HGSM-120***
125	POINT DETECTOR BAR	***HGSM-125***
138	MOTOR CUTOUT TERMINAL POST CAP	***HGSM-138***
139	MOTOR CUTOUT TERMINAL POST CAP	***HGSM-140***
	MOTOR CUTOUT TERMINAL POST INSULATION TUBE140A	
140-A	CIRCUIT CONTROLLER WIRE HARNESS GROMMET	***HGSM-140-A***

M23-A AND M23-B SWITCH MACHINE PARTS

INTERNAL LOCK RODS

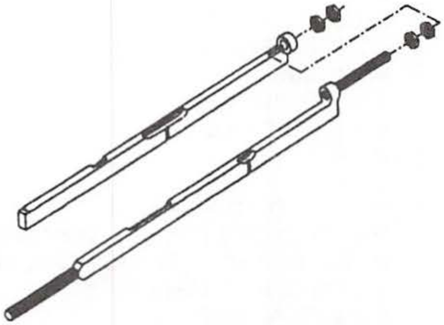
INTERNAL LOCK ROD ADJUSTABLE FOR RIGHT HAND AND LEFT HAND OPERATION
LW PART NO. HG996180-000



INTERNAL LOCK ROD FOR RIGHT HAND AND LEFT HAND OPERATION
LW PART NO. HG996188-000

INTERNAL POINT DETECTOR RODS

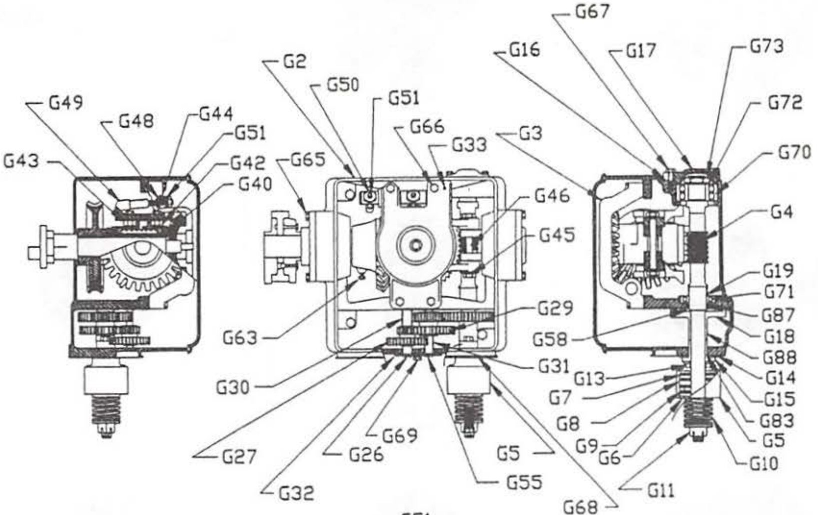
INTERNAL POINT DETECTOR ROD ASSEMBLY FOR M22 SWITCH MACHINE, 28" LONG
LW PART NO. HG996119-000



INTERNAL POINT DETECTOR ROD ASSEMBLY FOR M23 SWITCH MACHINE, 31 1/4" LONG
LW PART NO. HG996189-000

L & W INDUSTRIES

M23-A AND M23-B
GEAR BOX PARTS LISTING


G67
G16
G17
G73
G2
G50
G51
G72
G49
G48
G44
G51
G66
G33
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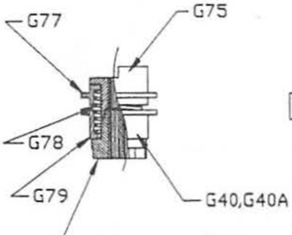
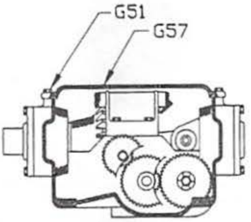
G70
G43
G42
G65
G40
G46
G4
G45
G19
G71
G29
G87
G63
G58
G18
G88
G31
G13
G14
G30
G7
G15
G8
G83
G69
G9
G6
G5
G27
G26
G5
G10
G55
G11
G32
G68


G77
G75
G78
G79
G40,G40A
G76



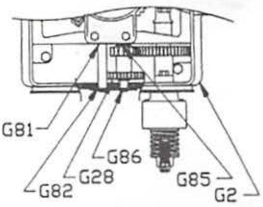
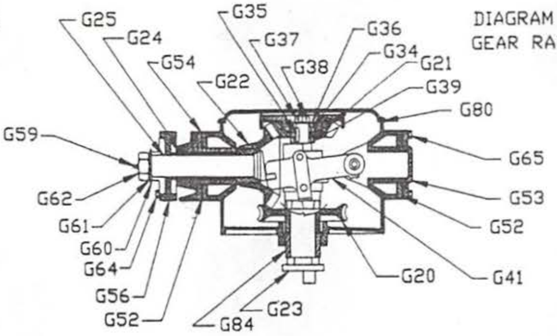
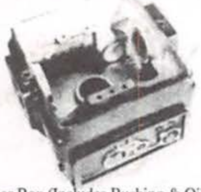
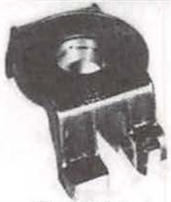

G81
G86
G28
G85
G82
G2

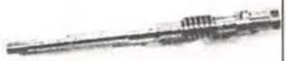
DIAGRAM OF 189 TO 1
GEAR RATIO ASSEMBLY

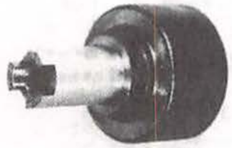

G25
G35
G36
G24
G37
G34
G54
G38
G21
G22
G39
G80
G59
G65
G53
G62
G52
G61
G60
G64
G20
G41
G56
G23
G52
G84

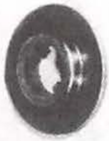
M23-A AND M23-B SWITCH MACHINES GEAR BOX REPLACEMENT PARTS

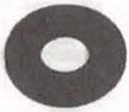

Gear Box (Includes Bushing & Oil Seals)
Item #2 Mfg. #G2

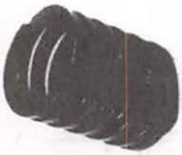

Top Bearing
Item #3 Mfg. #G3

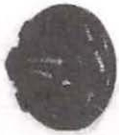

Worm Shaft
Item #4 Mfg. #G4


Friction Clutch Housing
Item #5 Mfg. #G5


Friction Clutch End Plate
Item #6 Mfg. #G6


Friction Clutch Disc
Item #9 Mfg. #G9


Friction Clutch Spring
Item #10 Mfg. #G10


Friction Clutch Adj. Nut
Item #11 Mfg. #G11

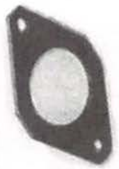
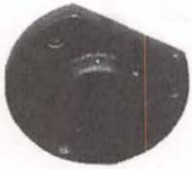
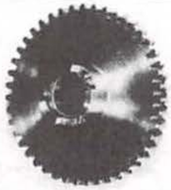
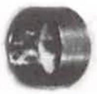
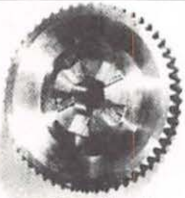


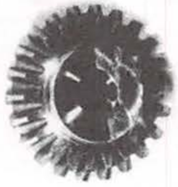
Plate
Item #15 Mfg. #G15

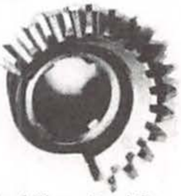

Bearing Cap
Item #17 Mfg. #G17


Clutch Gear (Includes Bushing, Item #88)
Item #18 Mfg. #G18


Spacer
Item #19 Mfg. #G19

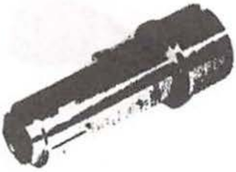

Worm Gear*
Item #20 Mfg. #G20


Hand-Throw Bevel Pinion for Style M-23A
Machines Item #   Mfg. #G21


Hand-Throw Bevel Gear
Item #21 Mfg. #G22

M23-A AND M23-B SWITCH MACHINES GEAR BOX REPLACEMENT PARTS

Main Crank (5 Spline)



Hand-Throw Lever Shaft

Selector Lever Shaft

Shaft

First Reduction Gear (360 to 1 Gear Ratio)

Second Reduction Gear (360 to 1 Gear Ratio)

Spacer

Spacer

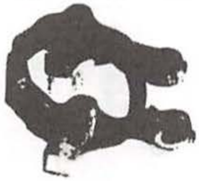
Shaft End Plate

Dowel

Bushing

Bushing

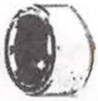
Selector Clutch (For 5 Spline Main Crank)

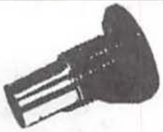


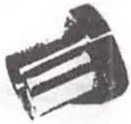
Selector Clutch Yoke

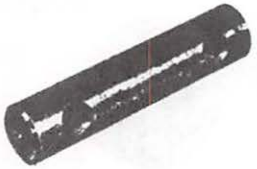
Roller

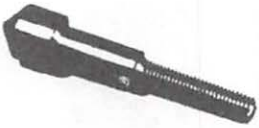
M23-A AND M23-B SWITCH MACHINES GEAR BOX REPLACEMENT PARTS

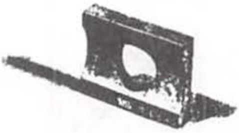

Roller

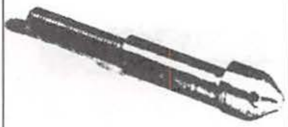

Roller Stud

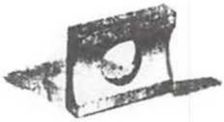

Eccentric Bushing

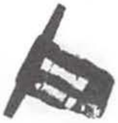

Shaft

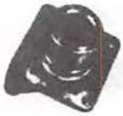

Cam Follower Link

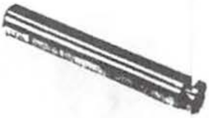

Washer

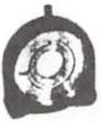

Cutout Rod Adj. Link

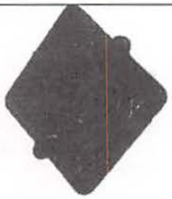

Washer

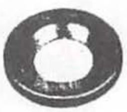

Yoke Support

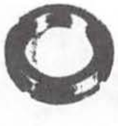

Lever Shaft Bearing


Shaft

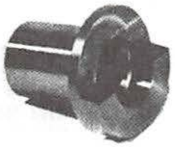

Lever Support

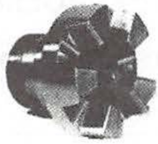

Gear Box Cover

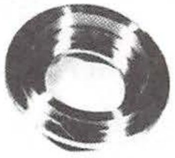

Bushing Oilite

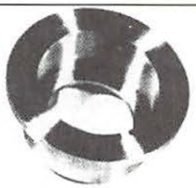

Lock Nut

M23-A AND M23-B SWITCH MACHINES GEAR BOX REPLACEMENT PARTS


Clutch for 5 Spline Main Crank
(For Hand Operation)
Item #75 Mfg. #G75-5H


Clutch for 5 Spline Main Crank
(For Motor Operation)
Item #76 Mfg. #G76-5M


Upper Clutch Cup
Item #77 Mfg. #G77


Lower Clutch Cup
Item #79 Mfg. #G79

Bushing
Item #81 Mfg. #G81-B

Bushing
Item #82 Mfg. #G82-B

Bushing
Item #83 Mfg. #G83-B

Bushing
Item #84 Mfg. #G84-B

Bushing
Item #85 Mfg. #G85-B

Bushing
Item #86 Mfg. #G86-B

M23-A AND M23-B
GEAR BOX REPLACEMENT PARTS

REPLACEMENT PARTS AND ORDERING REFERENCE

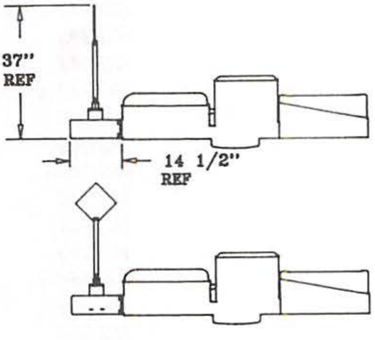
ITEM NO.	DESCRIPTION	LW PART NO
2	GEAR BOX (INCLUDES BUSHING AND OIL SEALS)	*HGG2*
3	TOP BEARING	*HGG3*
4	WORM SHAFT	*HGG4*
5	FRICTION CLUTCH HOUSING	*HGG5*
6	FRICTION CLUTCH END PLATE	*HGG6*
9	FRICTION CLUTCH DISC	*HGG9*
10	FRICTION CLUTCH SPRING	*HGG10*
11	FRICTION CLUTCH ADJUSTMENT NUT	*HGG11*
15	PLATE	*HGG15*
17	BEARING CUP	*HGG17*
18	CLUTCH GEAR (INCLUDES BUSHING, ITEM #88)	*HGG18*
19	SPACER	*HGG19-S*
20	WORM GEAR	*HGG20*
21	HAND-THROW BEVEL PINION FOR M23-A	*HGG21*
21A	HAND-THROW BEVEL PINION FOR M22-A	*HGG21A*
22	HAND-THROW BEVEL GEAR	*HGG22*
23	MAIN CRANK (5 SPLINE)	*HGG23*
23A	MAIN CRANK (10 SPLINE)	*HGG23A*
24	HAND-THROW LEVER SHAFT	*HGG24*
25	SELECTOR LEVER SHAFT	*HGG25*
26	SHAFT	*HGG26*
27	FIRST REDUCTION GEAR (360 TO 1 GEAR RATIO)	*HGG27*
27A	FIRST REDUCTION GEAR (528 TO 1 GEAR RATIO)	*HGG27A*
28	FIRST REDUCTION GEAR (189 TO 1 GEAR RATIO)	*HGG28*
29	SECOND REDUCTION GEAR (360 TO 1 GEAR RATIO)	*HGG29*
29A	SECOND REDUCTION GEAR (528 TO 1 RATIO)	*HGG29A*
30	SPACER	*HGG30*
31	SPACER	*HGG31*
32	SHAFT END PLATE	*HGG32*
33	DOWEL	*HGG33*
34	BUSHING	*HGG34-B*
39	BUSHING	*HGG39-B*

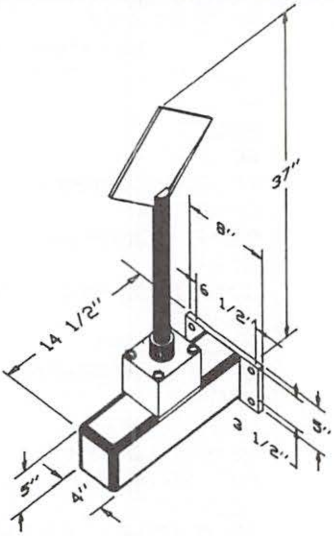
M23-A AND M23-B
GEAR BOX REPLACEMENT PARTS

ITEM NO.	DESCRIPTION	*LW PART NO*
40	SELECTOR CLUTCH (FOR 5 SPLINE MAIN CRANK)	*HGG40-5*
40A	SELECTOR CLUTCH (FOR 10 SPLINE MAIN CRANK)	*HGG40A-10*
41	SELECTOR CLUTCH YOKE	*HGG41*
42	ROLLER	*HGG42*
43	ROLLER	*HGG43*
44	ROLLER STUD	*HGG44*
45	ECCENTRIC BUSHING	*HGG45-B*
48	SHAFT	*HGG48*
49	CAM FOLLOWER LINK	*HGG49*
49A	WASHER	*HGG49A*
50	CUTOUT ROD ADJUSTMENT LINK	*HGG50*
51	WASHER	*HGG51*
53	YOKE SUPPORT	*HGG53*
54	LEVER SHAFT BEARING	*HGG54*
55	SHAFT	*HGG55*
56	LEVER SUPPORT	*HGG56*
57	GEAR BOX COVER	*HGG57*
58	BUSHING OILITE	*HGG58-B*
73	LOCK NUT	*HGG73*
75	CLUTCH FOR 5 SPLINE MAIN CRANK (HAND OPERATED)	*HGG75*
75A	CLUTCH FOR 10 SPLINE MAIN CRANK (HAND OPERATED)	*HGG75A*
76	CLUTCH FOR 5 SPLINE MAIN CRANK (MOTOR OPERATED)	*HGG76*
76A	CLUTCH FOR 10 SPLINE MAIN CRANK (MOTOR OPERATED)	*HGG76A*
77	UPPER CLUTCH SPRING	*HGG77*
78	SELECTOR CLUTCH CUP	*HGG78*
79	LOWER CLUTCH CUP	*HGG79*
81	BUSHING	*HGG81-B*
82	BUSHING	*HGG82-B*
83	BUSHING	*HGG83-B*
84	BUSHING	*HGG84-B*
85	BUSHING	*HGG85-B*
86	BUSHING	*HGG86-B*

NEW, INNOVATIVE "BULZI TARGET INDICATOR" WILL SAVE YOU TIME, LABOR, AND MONEY!

THE BULZI TARGET INDICATOR, P/N HGSF-50, ELIMINATES THE NECESSITY OF INSTALLING A HIGH STAR AND U-5 CONTROLLER BOX PRIOR TO THE INSTALLATION OF THE SWITCH MACHINE. THIS MAKES AN IMMEDIATE, ONE TIME INSTALLATION, THUS **SAVING YOU TIME, LABOR, AND MONEY.**





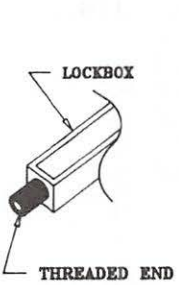
THIS COMPACT UNIT IS DESIGNED TO FIT DIRECTLY ONTO THE END OF THE CONTROLLER BOX AND IS DRIVEN BY THE MOTION OF THE LOCK BOX AND SLIDE BAR. IT WILL FUNCTION WHETHER THE SWITCH MACHINE IS BEING OPERATED ELECTRICALLY OR MANUALLY.

FEATURES:

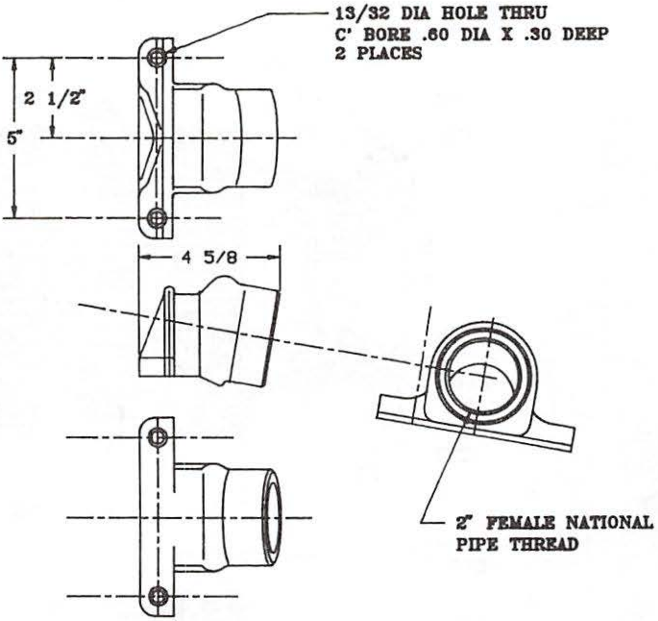
1. THE BULZI TARGET INDICATOR IS UNIVERSAL FOR ALL POINT AND TURNOUT CONFIGURATIONS.
2. THE BULZI OPERATING ARM HAS A BREAK AWAY PROTECTION SHEER PIN SYSTEM FOR QUICK, EASY REPAIR IN THE EVENT OF DAMAGES BY DRAGGING EQUIPMENT OR VANDALISM.

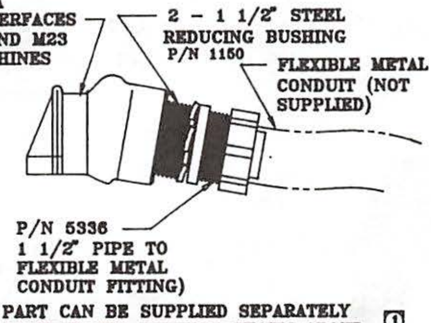
NOTE:

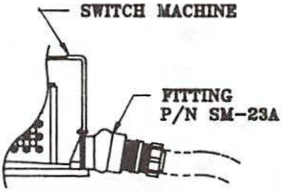
IT IS NECESSARY THAT THE SWITCH MACHINE IS EQUIPPED WITH A LOCK BOX THAT HAS A THREADED END (AS PER ILLUSTRATION) FOR EASY INSTALLATION. IF IT IS NOT EQUIPPED WITH THIS STYLE OF BOX, IT IS IMPORTANT THAT ONE IS ORDERED WITH YOUR BULZI TARGET INDICATOR. LOCK BOX PART NUMBER - HGSM-15



FITTING, LIQUID TIGHT CONDUIT TO SWITCH MACHINE


13/32 DIA HOLE THRU
C' BORE .60 DIA X .30 DEEP
2 PLACES
2 1/2"
5"
4 5/8
2" FEMALE NATIONAL
PIPE THREAD


P/N SM-23A
FITTING INTERFACES
WITH M22 AND M23
SWITCH MACHINES
2 - 1 1/2" STEEL
REDUCING BUSHING
P/N 1150
FLEXIBLE METAL
CONDUIT (NOT
SUPPLIED)
P/N 5336
1 1/2" PIPE TO
FLEXIBLE METAL
CONDUIT FITTING)


SWITCH MACHINE
FITTING
P/N SM-23A

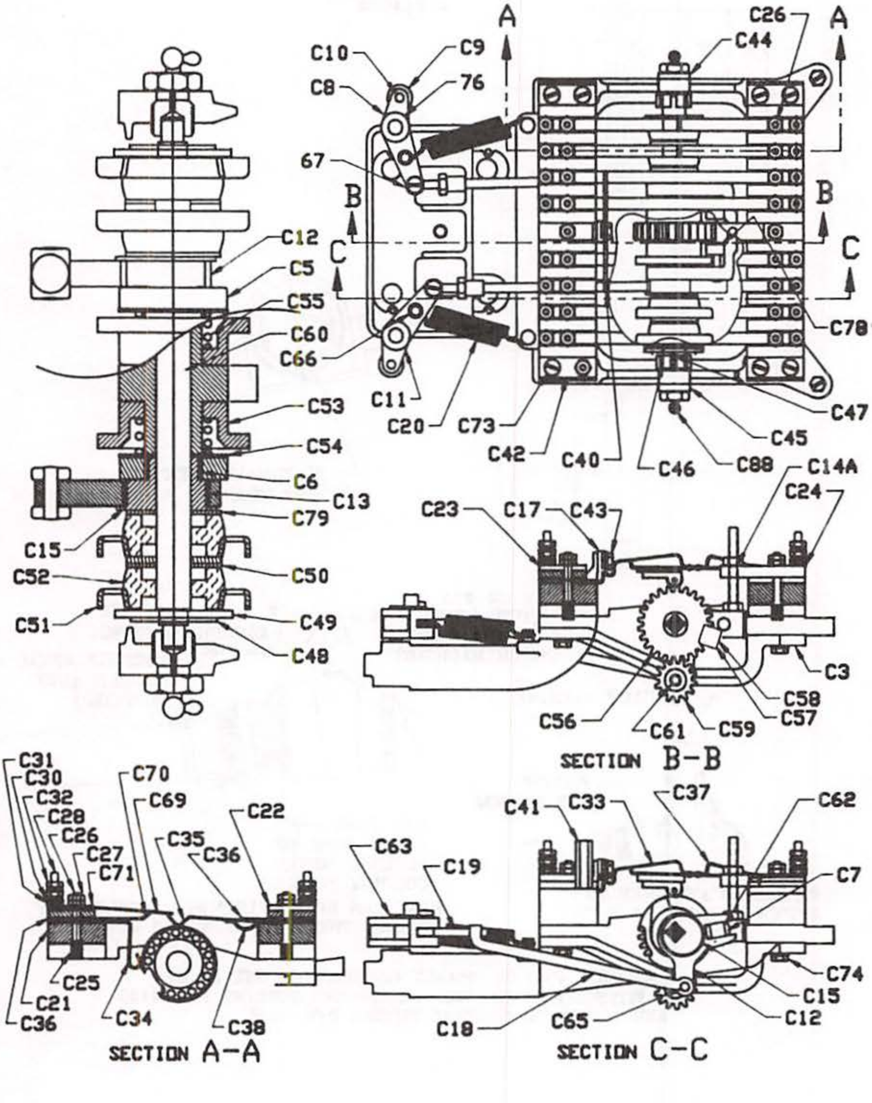
FITTING IS ATTACHED TO SWITCH MACHINE AS SHOWN

PART CAN BE SUPPLIED SEPARATELY OR WITH THE FITTINGS SHOWN ABOVE. [1]

[1] ASSEMBLY P/N SM-23ASSY CONSISTS OF ONE EA OF: A FITTING P/N SM-23A, A REDUCING BUSHING P/N 1150 AND A PIPE TO CONDUIT FITTING P/N 5336

INDICATION CIRCUIT CONTROLLER

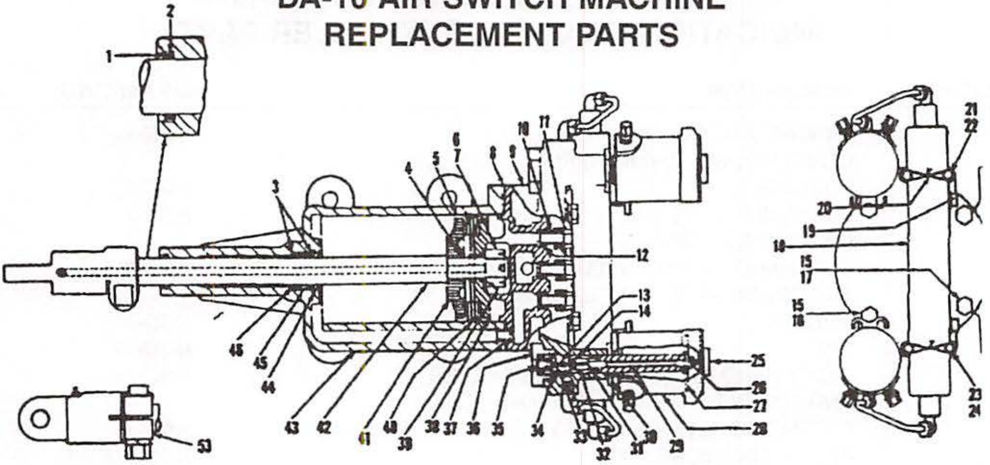
INDICATION CIRCUIT CONTROLLER WITH SELECTIVE POINT DETECTOR
USED ON M-3, M23-A, AND M23-B SWITCH MACHINES FOR SINGLE SWITCH


A
A
C10
C9
C8
76
C26
C44
67
B
B
C
C
C12
C5
C55
C60
C66
C53
C54
C6
C13
C79
C15
C52
C50
C51
C49
C48
C78
C11
C20
C73
C42
C40
C46
C88
C45
C47
C14A
C24
C23
C17
C43
C3
C58
C57
C59
C61
C56
SECTION B-B
C31
C30
C32
C28
C26
C27
C71
C70
C69
C35
C36
C22
C25
C21
C36
C34
C38
SECTION A-A
C41
C33
C37
C62
C63
C19
C7
C74
C15
C12
C65
C18
SECTION C-C

M23-A, M23-B & M3 SWITCH MACHINE INDICATION CIRCUIT CONTROLLER PARTS

ITEM NO.	DESCRIPTION	*LW PART NO*
Aa	INDICATION CIRCUIT CONTROLLER COMPLETE WITH ADJUSTABLE YOKE STOP	*HGC-Aa*
6	BUSHING	*HGC-6*
7	BUSHING FOR USE WITH SQUARE HEAD PIN (REFERENCE ITEM 62)	*HGC-7*
8	LEFT HAND CRANK, INCLUDES ROLLER AND PIN (REFERENCE ITEM 9 AND 10)	*HGC-8*
9	ROLLER	*HGC-9*
10	PIN	*HGC-10*
11	RIGHT HAND CRANK, INCLUDES ROLLER AND PIN (REFERENCE ITEM 9 AND 10)	*HGC-11*
13	OPERATING LEVER BUSHING	*HGC-13*
14A	ADJUSTABLE YOKE STOP	*HGC-14A*
19	EYE ROD	*HGC-19*
33	CONTACT SPRING	*HGC-33*
34	CONTACT SPRING	*HGC-34*
35	CONTACT SPRING	*HGC-35*
36	REINFORCING SPRING	*HGC-36*
37	REINFORCING SPRING	*HGC-37*
38	REINFORCING SPRING	*HGC-38*
44	TRUNION	*HGC-44*
45	TRUNION	*HGC-45*
51	CONTACT SEGMENT	*HGC-51*
53	INDICATION CAM	*HGC-53*
62	PIN, SQUARE HEAD	*HGC-62*
67	SCREW	*HGC-67*
69	CONTACT SPRING	*HGC-69*
70	STOP SPRING	*HGC-70*
98	WIRE HARNESS GROMMET	*HGC-98*

DA-10 AIR SWITCH MACHINE REPLACEMENT PARTS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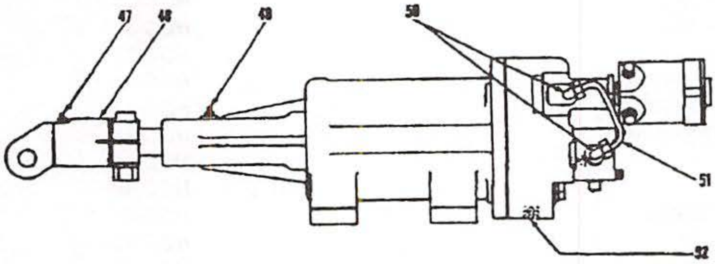
STRAIGHT SCREW EYE WHEN REQUIRED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LW PART NO. & ITEM NO.	DESCRIPTION	WABCO NO.
HGDA-01	RING, RETAINER	J792183
HGDA-02	WIPER	J791579
HGDA-03	RING, PACKING BACK-UP, 2 EA/KIT	M371990
HGDA-04	RING, 1 X 1 1/4 "O", 2 EA/KIT	J067427
HGDA-05	PACKING, 2 EA./KIT	J067421
HGDA-06	COTTER, 3/16" X 2" STEEL T.P.C 2 EA/KIT	J048636
HGDA-07	NUT, 1" - 14 HEX, SLOTTED STEEL CAD P.C.1	J480160
HGDA-08	GASKET, CYLINDER HEAD	M371998
HGDA-09	CHAMBER, VALVE	M371971
HGDA-10	COUPLING, VALVE, 3 EA./KIT	M372046
HGDA-11	CONNECTOR, VALVE, 3 EA./KIT	M372047
HGDA-12	RING, 5/8 X 13/16 "O", 8 EA./KIT	J067130
HGDA-13	RING, 11/16 X 7/8 "O", 2 EA./KIT	J067123
HGDA-14	RING, 5/8 X 13/16 "O", 2 EA./KIT	J067130

DA-10 AIR SWITCH MACHINE REPLACEMENT PARTS

LW PART NO. & ITEM NO.	DESCRIPTION	WABCO NO.
HGDA-15	WASHER, 1/2” STEEL LOCK XHVY 4 EA/KIT	J047769
HGDA-16	SCREW, 1/2 X 4 1/2 HEX STEEL 2 EA/KIT	J050025
HGDA-17	SCREW, 1/2 X 3 1/2 HEX STEEL 2 EA/KIT	J050105
HGDA-18	VALVE, PILOTAIR	J337129
HGDA-19	PLUG, EXHAUST, 2 EA./KIT	M372007
HGDA-20	WIRE, .052” STAINLESS STEEL 1’ 3”	A047767
HGDA-21	SCREW, 5/16 X 2 1/2	M372212
HGDA-22	WASHER, 5/16” STEEL LOCK XHVY	J047767
HGDA-23	SCREW, 1/4 X 2 1/2 3 EA./KIT	M372211
HGDA-24	WASHER, 1/4” STEEL LOCK XHVY 3 EA/KIT	J047766
HGDA-25	CAP, MAGNET, 2 EA./KIT	M323630
HGDA-26	NUT, 2 EA./KIT	M001509
HGDA-27	ARMATURE, MAGNET, 2 EA./KIT	M001707H
HGDA-28	MAGNET, 130 OHM, 2 EA./KIT	N371995
HGDA-29	STEM, ARMATURE, 2 EA./KIT	M372015
HGDA-30	NUT, MAGNETIZED LOCK, 2 EA./KIT	M371999
NEEDLE VALUE KIT ITEMS 31, 32 & 33		
HGDA-31	VALVE, ARMATURE, 2 EA./KIT	M372014
HGDA-32	SEAT, VALVE, 2 EA./KIT	M372024
HGDA-33	VALVE, PIN, 2 EA./KIT	M003100
HGDA-34	RING, SQUARE RETAINING, 2 EA./KIT	J791578
HGDA-35	SPRING, VALVE, 2 EA./KIT	J068203
HGDA-36	NUT, VALVE CAP, 2 EA./KIT	N371989
HGDA-37	BUSHING	M001091
HGDA-38	FOLLOWER, PISTON	M371968
HGDA-39	SPACER, PISTON NUT	M371985
HGDA-40	FOLLOWER, PISTON	M106286
HGDA-41	FOLLOWER, PISTON	M371967
HGDA-42	ROD, PISTON	N371987
HGDA-43	CYLINDER	M371969
HGDA-44	RING, RETAINER	J791577
HGDA-45	RETAINER, V-RING, 2 EA./KIT	J7233192
HGDA-46	PACKING, U-CUP, 2 EA./KIT	J067436
HGDA-47	FITTING, 1/8” P.T. STRAIGHT LUB.	J039137
HGDA-48	EYE, SCREW	N371979
HGDA-49	FITTING, 1/8” P.T.F. LUB, PRESSURE RELIEF	J032798
HGDA-50	FITTING, ELL. COMPRESSION 4 EA./KIT	J032798
HGDA-51	TUBING COPPER 1/2” INT PIPE THREAD	M372069
HGDA-52	PROTECTOR, 1/2” INT. PIPE THREAD	J032922
HGDA-53	EYE, SCREW (STRAIGHT)	M371980

NA-15 & A5 AIR MACHINE REPLACEMENT PARTS

COVER

NA-15 COVER, HASP ASSEMBLY
COMPLETE WITH HARDWARE
LW PART NO. HG3801-X

OPERATING ROD

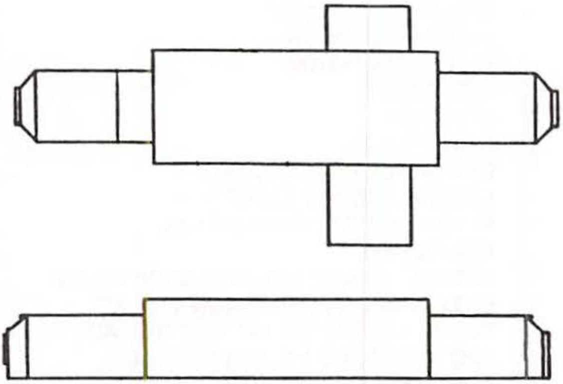
OPERATING ROD, FOR NA-15 SWITCH
MACHINE WITH BRONZE BUSHING.
1 1/4" X 64" LONG. 1" OFFSET RIGHT
LW PART NO. HL996899-001

OPERATING ROD, FOR NA-15 SWITCH
MACHINE WITH BRONZE BUSHING.
1 1/4" X 78" LONG. 1" OFFSET RIGHT
LW PART NO. HL996899-000

A5 AIR SWITCH MACHINE PARTS

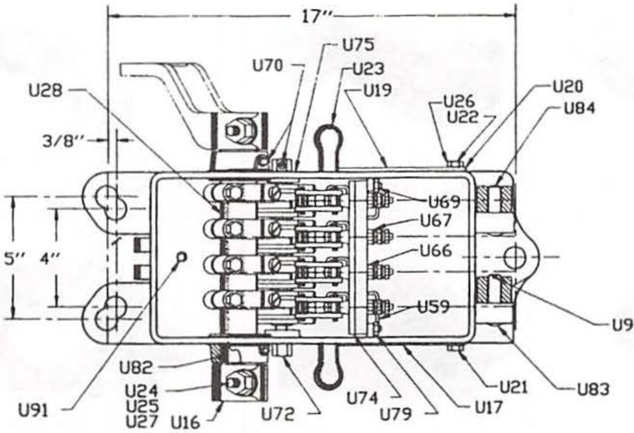
COVER

A5 SWITCH MACHINE COVER COMPLETE.
LW PART NO. HG996660-000



L & W INDUSTRIES

U-5 SWITCH CIRCUIT CONTROLLER


17″
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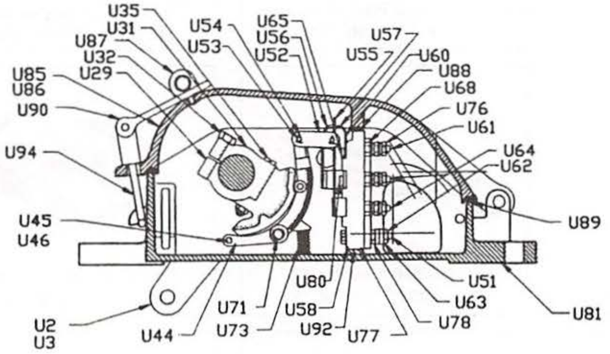
U83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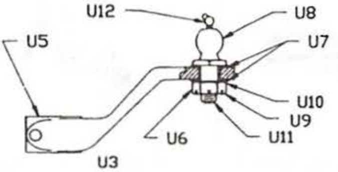
U2
U3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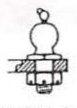

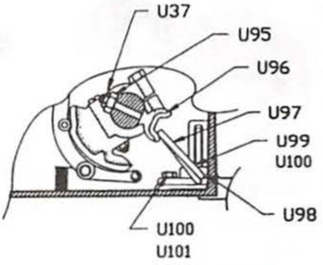
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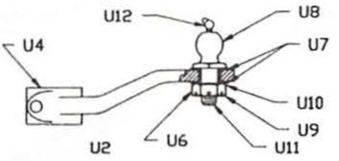
U101

RETURN SPRING FOR
2 POSITION - 2 AND
3 POSITION CAMS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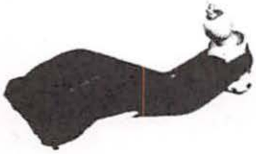
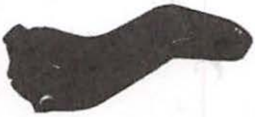
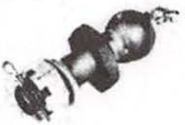
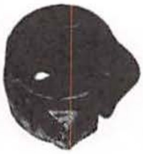
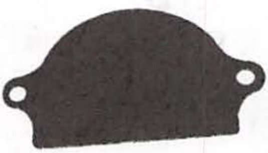
U-5 SWITCH CIRCUIT CONTROLLER REPLACEMENT PARTS

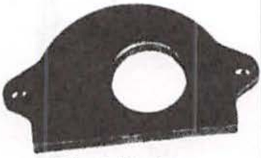

Non-Operating Crank compl., 2-13/32" offset, w/ non-insulated ball stud
Item #3A "J" Mfg. #U3A

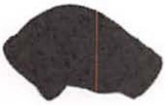

Crank Only, 2-13/32" offset (5/8" dia. reamed hole)
Item #5A "J" Mfg. #U5A

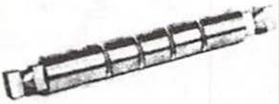

Ball Stud complete (specify size of Grease Fitting)
Item #8 "J" Mfg. #U8

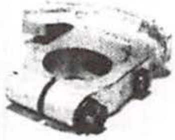

Clamp
Item #16 "J" Mfg. #U16

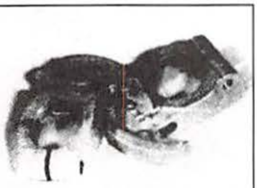

Wire Guide Plate (Blank)
Item #17 "J" Mfg. #U17

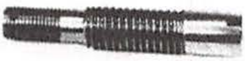

Wire Guide Plate (with 1-1/2" Tapped Hole)
Item #19 "J" Mfg. #U19

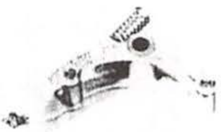

Ventilator Complete
Item #23 "J" Mfg. #U23

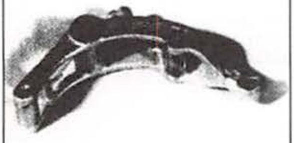

Cam Shaft (for 4-way 2-position controller)*
Item #28 "J" Mfg. #U28

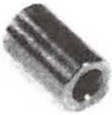

Cam Complete (2-position)
Item #29 "J" Mfg. #U29 ASSY

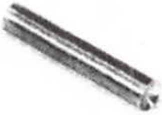

Cam Only (2-position)*
Item #29 "J" Mfg. #U29


Cam Bolt, Stainless Steel Adj. Screw
Item #35 "J" Mfg. #U35


Operating Arm Complete
Item #44 "J" Mfg. #U44


Operating Arm Complete
Item #44A "J" Mfg. #U44A


Roller, Stainless Steel
Item #45 "J" Mfg. #U45


Pin
Item #46 "J" Mfg. #U46

U-5 SWITCH CIRCUIT CONTROLLER REPLACEMENT PARTS

Phenolic Lever (Link)
Item #52

Rocker Shaft (4-way)
Item #71

Nut
Item #72

Spring
Item #73

Case (for 4-way, 2 position, 2&3 position controllers) Item #81

Bushing
Item #82

Cover Only (4-way)
Item #86

Hasp Lug
Item #87

Hasp Complete
Item #90

Operating Crank
Item #96

Return Spring Clamp
Item #98

CONDUIT ASSEMBLIES

CONDUIT ASSEMBLY 1 1/2" GREENFIELD
CONDUIT FOR U.S.&S. U5 SWITCH
CIRCUIT CONTROLLER
LW PART NO. HG1740-10X

U-5 SWITCH CIRCUIT CONTROLLER REPLACEMENT PARTS

PART LIST AND ORDERING REFERENCE

ITEM NO.	DESCRIPTION	*LW PART NO*
2	OPERATING CRANK COMPLETE, 3/4" OFFSET WITH INSULATED BALL STUD.	*HGU2*
2A	OPERATING CRANK COMPLETE, 3/4" OFFSET WITH NON-INSULATED BALL STUD.	*HGU2A*
3	OPERATING CRANK COMPLETE, 2 13/32" OFFSET WITH INSULATED BALL STUD.	*HGU3*
3A	OPERATING CRANK COMPLETE, 2 13/32" OFFSET WITH NON-INSULATED BALL STUD	*HGU3A*
4	CRANK ONLY, 3/4" OFFSET (13/16" DIA. HOLE)	*HGU4*
4A	CRANK ONLY, 3/4" OFFSET (5/8" DIA. HOLE)	*HGU4A*
5	CRANK ONLY, 2 13/32" OFFSET (13/16" DIA. HOLE)	*HGU5*
5A	CRANK ONLY, 2 13/32" OFFSET (5/8" DIA. HOLE)	*HGU5A*
8	BALL STUD COMPLETE 5/8" - 11 STUD	*HGU8*
8A	BALL STUD COMPLETE 3/4" - 10 STUD	*HGU8A*
16	CLAMP	*HGU16*
17	WIRE GUIDE PLATE (BLANK)	*HGU17*
19	WIRE GUIDE PLATE (WITH 1 1/2" NPT HOLE)	*HGU19*
19A	WIRE GUIDE PLATE (WITH 2" NPT HOLE)	*HGU19A*
23	VENTILATOR COMPLETE	*HGU23*
28	CAM SHAFT (FOR 4-WAY 2 POSITION CONTROLLER)	*HGU28*
28A	CAM SHAFT (FOR 4-WAY COMBO 2 & 3 CONTROLLER)	*HGU28A*
28B	CAM SHAFT (FOR 4-WAY 3 POSITION CONTROLLER)	*HGU28B*
28C	CAM SHAFT (FOR 6-WAY 2 POSITION CONTROLLER)	*HGU28C*
28D	CAM SHAFT (FOR 6-WAY 3 POSITION OR COMBO 2&3)	*HGU28D*
29	CAM COMPLETE (2 POSITION)	*HGU29*
32	CAM ONLY (2 POSITION)	*HGU32*
35	CAM BOLT, STAINLESS ADJUSTING SCREW	*HGU35*

U-5 SWITCH CIRCUIT CONTROLLER REPLACEMENT PARTS

PART LIST AND ORDERING REFERENCE

TEM NO.	DESCRIPTION	*LW PART NO*
4	OPERATING ARM COMPLETE	*HGU44*
4A	OPERATING ARM ONLY	*HGU44A*
5	ROLLER, STAINLESS STEEL	*HGU45*
6	PIN	*HGU46*
2	PHENOLIC LEVER (LINK)	*HGU52*
3	PIN	*HGU53*
5	HEEL CONTACT	*HGU55*
6	REVERSE CONTACT	*HGU56*
7	NORMAL CONTACT	*HGU57*
0	SUPPORT CONTACT (REINFORCED SPRING)	*HGU60*
1	ROCKER SHAFT (4-WAY)	*HGU71*
1A	ROCKER SHAFT (6-WAY)	*HGU71A*
2	NUT	*HGU72*
3	SPRING	*HGU73*
1	CASE (FOR 4-WAY 2 POSITION,	*HGU81*
	2 & 3 POS. CONTROLLERS)	*HGU81A*
1A	CASE (ARRANGED FOR RETURN SPRING ON OUTSIDE OF CASE FOR 4-WAY 3 POSITION CONTROLLERS)	
2	BUSHING	*HGU82*
5	COVER COMPLETE (4-WAY)	*HGU85*
6	COVER ONLY (4-WAY)	*HGU86*
7	HASP LUG	*HGU87*
0	HASP COMPLETE	*HGU90*
6	OPERATING CRANK	*HGU96*
8	RETURN SPRING CLAMP	*HGU98*

L & W INDUSTRIES

G.R.S. SWITCH MACHINE REPLACEMENT PARTS

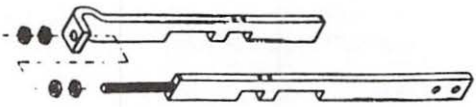
GUARDS

GUARD FOR THROW ROD
LW PART NO. HL090117-000

GUARD FOR THROW ROD
LW PART NO. HL090182-000

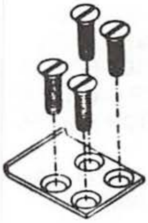
INTERNAL LOCK RODS

INTERNAL LOCK ROD, LEFT HAND
WITH ALL HARDWARE
LW PART NO. HG996117-000



INTERNAL LOCK ROD FOR SWITCH
MACHINES 5A, E, G, AND H
LW PART NO. HG996842-000

LOCK ROD CLIP KIT WITH
FOUR 5/16" -18 X 3/4" SCREWS
LW PART NO. HG031190-000

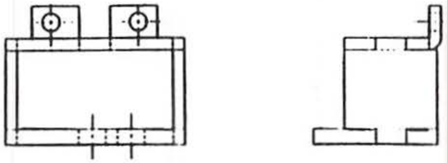


INTERNAL POINT DETECTOR RODS

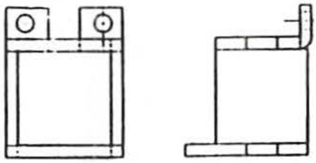
INTERNAL POINT DETECTOR ROD
COMPLETE WITH ALL HARDWARE.
LW PART NO. HG996118-000

WEAR PLATES

WEAR PLATE
LW PART NO. HG031195-000



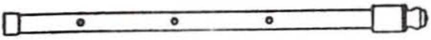
WEAR PLATE
LW PART NO. HG031193-000



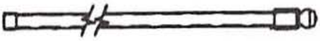
G.R.S. SWITCH MACHINE
REPLACEMENT PARTS

OIL FITTINGS

OIL TOP FITTING
LW PART NO. HG991118-000



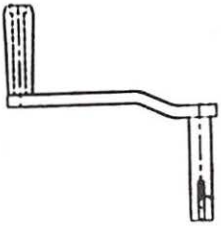
OIL BOTTOM FITTING
LW PART NO. HG991110-000



HAND CRANKS

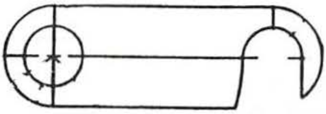
HAND CRANK FOR SWITCH MACHINE
MOTOR. 6" LONG
LW PART NO. HG996067-000

HAND CRANK FOR SWITCH MACHINE
MOTOR. 12" LONG
LW PART NO. HG996067-001



CONNECTORS

SWITCH BOX JUMPER CONNECTOR
1 3/8" CENTERLINE OF HOLES
LW PART NO. 9A2206

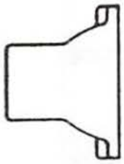


L & W INDUSTRIES

GRS SWITCH MACHINE REPLACEMENT PARTS

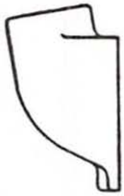
CABLE ENTRANCE COUPLERS

CABLE ENTRANCE COUPLER STRAIGHT
WITH 1 1/4" NPT THREADED HOLE
LW PART NO. HG996870-001



CABLE ENTRANCE COUPLER STRAIGHT
WITH 1 1/2" NPT THREADED HOLE
LW PART NO. HG996870-002

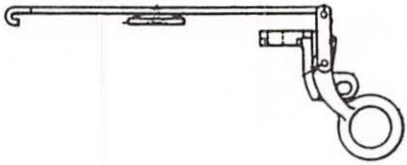
CABLE ENTRANCE COUPLER 90 DEGREE
WITH 1 1/4" NPT THREADED HOLE
LW PART NO. HG996253-001



CABLE ENTRANCE COUPLER 90 DEGREE
WITH 1 1/2" NPT THREADED HOLE
LW PART NO. HG996253-002

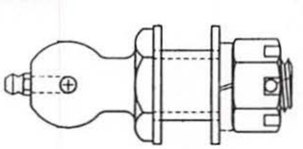
SWITCH MACHINE COVER PARTS

LATCH ASSEMBLY FOR GRS
SWITCH MACHINE COVERS
LW PART NO. HG996254-000



BALL STUDS

BALL STUD 1" DIAMETER, 5/8" - 11 THREADS
LW PART NO. HG996859-000



YARD MATERIALS

ELECTRICAL PNEUMATIC RETARDERS

ELECTRICAL MECHANICAL RETARDERS

RETARDER AIR VALVES

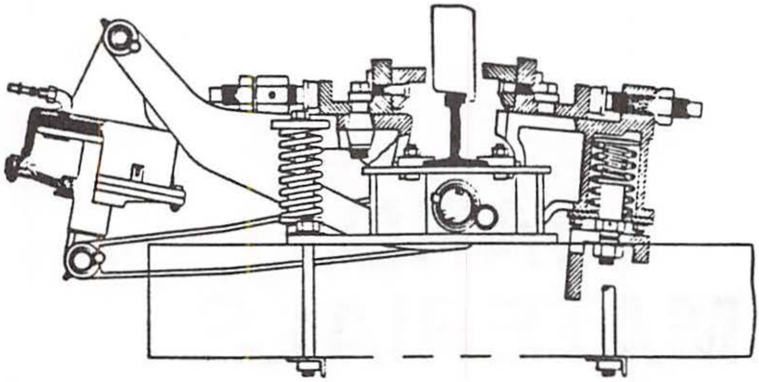
BRAKE SHOES

BRAKE SHOE BOLTS

SWITCH LAMPS

L & W INDUSTRIES

ELECTRO PNEUMATIC & ELECTRO MECHANICAL RETARDERS



L&W INDUSTRIES MANUFACTURES
A NUMBER OF PARTS
FOR ELECTRO PNEUMATIC
&
ELECTRO MECHANICAL
RETARDERS

THE ITEMS LISTED IN THIS SECTION ARE
ONLY THOSE ITEMS WE STOCK OR
ARE ACTIVELY MANUFACTURING.

PLEASE FEEL FREE TO CALL US AT
800-852-5587
FOR ANY ITEMS NOT LISTED.

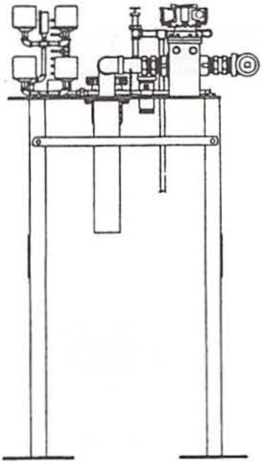
ELECTRO PNEUMATIC RETARDER VALVES

RCV-1

The L&W RCV-1 Retarder Control Valve is a pneumatic control system designed to maintain a preset air pressure value in the cylinders of an electropneumatic car-retarder. The RCV-1 Retarder Control Valve System is remotely controlled by an operator who can select between manual or automatic operation. When in manual operation the operator can select heavy, light, or off. When in automatic operation the RCV-1 Retarder Control Valve will maintain preset air pressures as called for by the automatic controls.

The L&W RCV-1 Retarder Control Valve consists of two intake valves. One being a 1-1/2" pipe size, solinoid operated, poppit type, two-way, normally closed, 12VDC valve with internal pilot-air and the second being, the same as the first, except for 3/4" pipe size. The exhaust valve is a 1-1/2" pipe size, solinoid operated, poppit type, two-way, normally closed, 12VDC valve with external pilot air. The external pilot air allows the exhaust cylinders for maintenance purposes. Pressures are set and maintained by fast acting micro-pressure switches. Supply air is filtered for oil and dirt, and all electrical components are provided with electrical surge suppression.

Maintenance is an excellent feature of the RCV-1 Retarder Control Valve. All major components such as the control valves and pressure switches can be removed without having to dismantle piping, making field maintenance simple and fast.

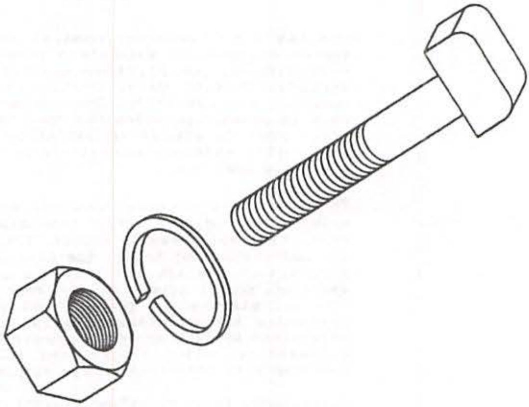


- ●80-150 PSIG OPERATING PRESSURE
- ●12 VDC NOMINAL OPERATING VOLTAGE
- ●HIGH-SPEED RESPONSE
- ●INDEPENDENTLY PRESET PRESSURES
- ●MICRO-PRESSURE SWITCHES
- ●ELECTRICAL SURGE SUPPRESSION
- ●PARTS REPLACEABLE WITHOUT REMOVING ANY PIPING

BRAKE SHOE BOLTS
ELECTRO MECHANICAL

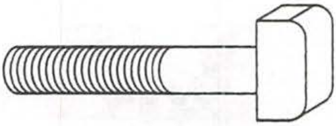
TEE HEAD BOLTS

BOLT T-HEAD WITH LOCKWASHER & NUT
3/4"L X 1" GRADE 8
COURSE THREAD
LW PART NO. GA8800-X



BOLT T-HEAD WITH LOCKWASHER & NUT
3/4"L X 1" GRADE 8
FINE THREAD
LW PART NO. GA8800-1X

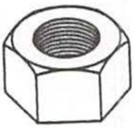
BOLT T-HEAD ONLY
3/4"L X 1" GRADE 8
COURSE THREAD
LW PART NO. GA8800



BOLT T-HEAD ONLY
3/4"L X 1" GRADE 8
FINE THREAD
LW PART NO. GA8800-1

NUT ONLY COURSE THREAD
LW PART NO. GA8802

NUT ONLY FINE THREAD
LW PART NO. GA8804



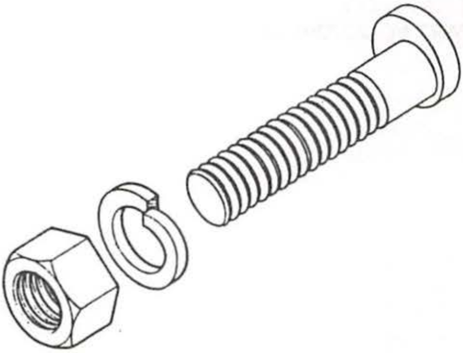
LOCKWASHER FINE & COURSE THREAD
LW PART NO. GA8803

BRAKE SHOE BOLTS
ELECTRO PNEUMATIC

GRADE 8 BOLTS

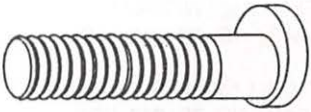
BOLT WITH LOCKWASHER & NUT
3-1/4"L X 7/8" GRADE 8
LW PART NO. GB8850-X

BOLT ONLY
3-1/4"L X 7/8" GRADE 8
LW PART NO. GB8850



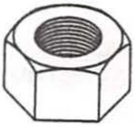
BOLT WITH LOCKWASHER & NUT
3-3/4"L X 7/8" GRADE 8
LW PART NO. GB8852-X

BOLT ONLY
3-3/4"L X 7/8" GRADE 8
LW PART NO. GB8852

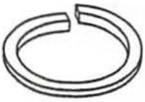


BOLT WITH LOCKWASHER & NUT
4"L X 7/8" GRADE 8
LW PART NO. GB8854-X

BOLT ONLY
4"L X 7/8" GRADE 8
LW PART NO. GB8852

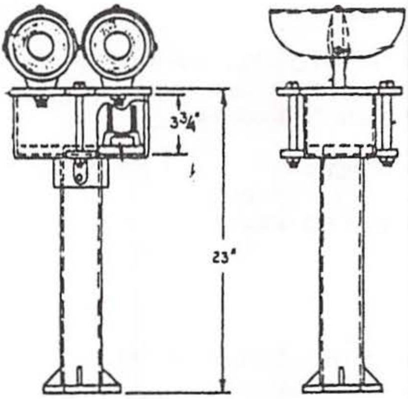


NUT ONLY FOR 8850, 8852, 8854 BOLT
LW PART NO. GB9445
LW PART NO. GB9445S (WITH SECURITY LOCK NUT)



LOCKWASHER FOR 8850, 8852, 8854
LW PART NO. GB9520

BLUE FLAG & SWITCH LAMPS



COLORLIGHT BLUE FLAG
BLUE/YELLOW
LW PART NO. ZB7210-X

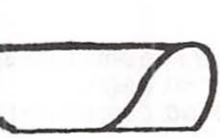
COLORLIGHT SWITCH LAMPS
GREEN/YELLOW
LW PART NO. ZB7200-1X

REPLACEMENT LAMPS WITH SHIELD

GREEN LAMP W/SHIELD
LW PART NO. ZD1019-1XG

YELLOW LAMP W/SHIELD
LW PART NO. ZD1019-1XY

BLUE LAMP W/SHIELD
LW PART NO. ZD1019-1XB



SHIELD ONLY
LW PART NO. 5S7402

TOOLS
&
EQUIPMENT

TEST SHUNTS

TERMINAL WRENCHES

RELAY SHIPPING CARTONS

PLAN HOLDERS

CRIMPING TOOLS & WIRE STRIPPERS

CONTACT SPRAYS

SWITCH ADJUSTMENT WRENCHES

BONDING DRILL BITS

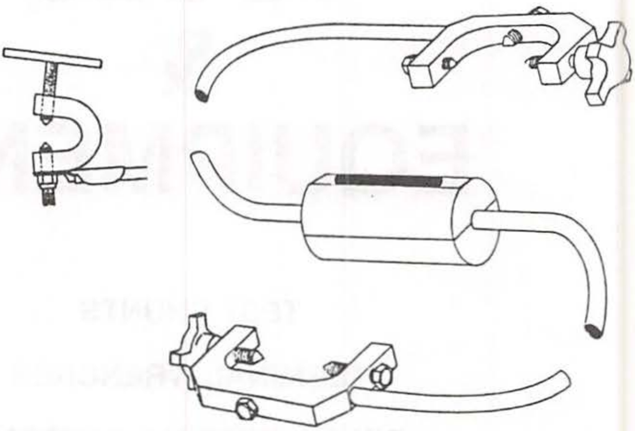
BOND WELDERS & MOLDS

DUCT SEAL

PADLOCKS

TOOLS & EQUIPMENT

TEST SHUNT 0.06 OHM & HARDWIRED



TEST SHUNT
0.06 OHM
TOP RAIL CONNECTION
LW PART NO. CA2900-X

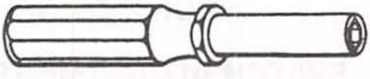
TEST SHUNT
0.06 OHM
BOTTOM RAIL CONNECTION
LW PART NO. CA2903-X

TEST SHUNT
HARDWIRED
TOP OF RAIL CONNECTION
LW PART NO. CA2900-1X

TEST SHUNT
HARDWIRED
BOTTOM OF RAIL CONNECTION
LW PART NO. CA2903-1X

TERMINAL & TEST WRENCHES

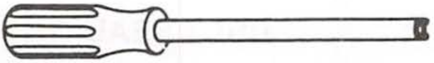
1/2" DRIVE STANDARD AAR TERMINAL WRENCH



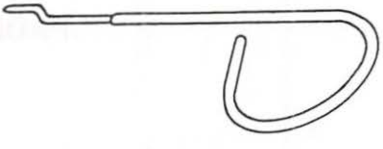
1/2" X 4-1/2" LONG
LW PART NO. EC032619-1X

1/2" X 6-1/2" LONG
LW PART NO. EC032619-3X

TEST WRENCHES & EXTRACTOR TOOLS



TEST NUT WRENCH
LW PART NO. EC032619-22X



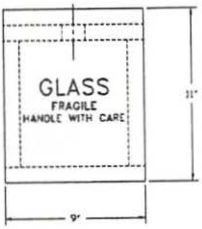
EXTRACTOR TOOL
LW PART NO. EC032619-25

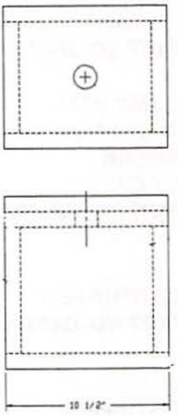
TOOLS & EQUIPMENT

RELAY SHIPPING CARTONS

RELAY SHIPPING CARTON
FOR 1EA 4 PT OR 6 PT SHELF RELAY
STYROFOAM PROTECTIVE HOLDER
DURABLE CARDBOARD SHIPPING BOX
LW PART NO. EC2505-X

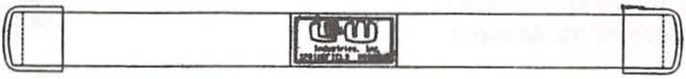
RELAY SHIPPING CARTON
FOR 1EA PLUG IN STYLE B1 OR P150
STYROFOAM PROTECTIVE HOLDER
DURABLE CARDBOARD SHIPPING BOX
LW PART NO. EC2505-1X





CIRCUIT PLAN HOLDER

CIRCUIT PLAN HOLDER
TUBE TYPE
2" DIA X 24" LONG
LW PART NO. ZB1746-X



PADLOCKS

LOCK TERMINAL WRENCH
ZAMAK W/O CHAIN
LW PART NO. ZB46023

CHART PAPER

CHART PAPER
XXXX
LW PART NO. AA1720B

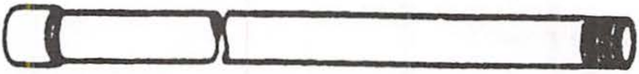
CHART PAPER
XXXX
LW PART NO. AA1720C

CHART PAPER
XXXX
LW PART NO. AA1740B

TOOLS & EQUIPMENT

PIPE CONDUIT FOR UNDERGROUND CABLES

PIPE GALV STEEL
4" DIA X 21FT LONG
1 COUPLER
1 POLY CAP
LW PART NO. ZB31024-X21



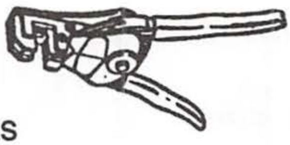
PIPE GALV STEEL
4" DIA X 10-1/2FT LONG
1 COUPLER
1 POLY CAP
LW PART NO. ZB31023-X

CABLE STRIPPER

CABLE STRIPPER
LW PART NO. DA032100-1X

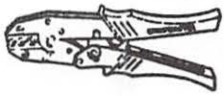
WIRE STRIPPERS

WIRE STRIPPERS
FOR #10 - #22 WIRE
REPLACEABLE CUTTING BLADES
LW PART NO. 9A45-092



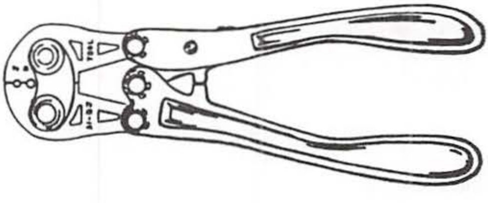
CRIMPING TOOLS

CRIMPING TOOL RATCHET TYPE
FOR WIRE EYELETS #10-#16 HEAVY DUTY
LW PART NO. 9A59239-4



CRIMPING TOOL COMPRESSION
FOR NICOPRESS SLEEVES
GROOVES B & A
LW PART NO. BA17-BA

CRIMPING TOOL COMPRESSION
FOR NICOPRESS SLEEVES
GROOVES D & J
LW PART NO. BA31-DJ



CRIMPING TOOL COMPRESSION
FOR NICOPRESS SLEEVES
GROOVES D & C
LW PART NO. BA31-DC

CRIMPING TOOL COMPRESSION
FOR NICOPRESS SLEEVES
GROOVES X P & J
LW PART NO. BA53-XPJ

TOOLS & EQUIPMENT

CONTACT SPRAY

GLOBO QUAD-OIL
WATER REPELLANT
12 OZ CAN
LW PART NO. ZB3002

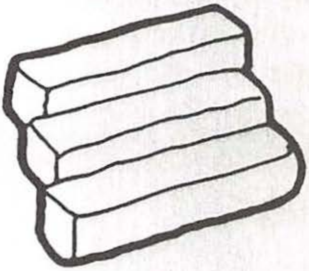
Contact
Cleaner

Globo Oil eliminates frost or moisture on exposed contacts. Can be used on gate contacts, switch machine contacts, switch motors, and all other controller contacts. Globo Oil repels 1200 times its volume in water.

DUXSEAL

DUXSEAL
1 LB BAG
LW PART NO. ZB1772-1

DUXSEAL
5 LB BAG
LW PART NO. ZB1772



TOOLS & EQUIPMENT

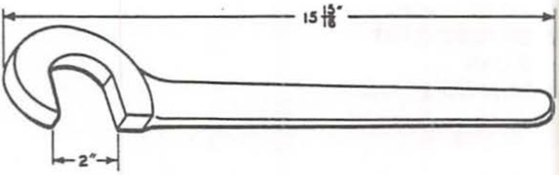
SWITCH ADJUSTMENT WRENCHES

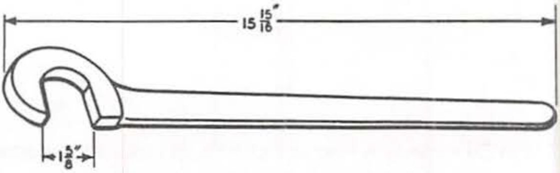
WRENCH FOR THROW RODS 1-1/4"
15-15/16" LONG
LW PART NO. HL061131-0025

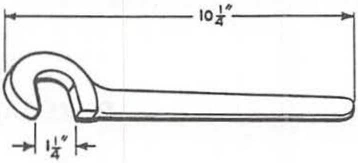
WRENCH FOR THROW RODS 1"
15-15/16" LONG
LW PART NO. HL061131-001

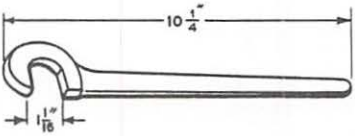
WRENCH FOR THROW RODS 3/4"
10-1/4" LONG
LW PART NO. HL061131-0034

WRENCH FOR THROW RODS 5/8'
10-1/4" LONG
LW PART NO. HL061131-0058



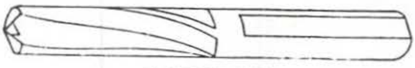






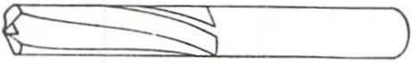
BONDING DRILL BITS

BONDING DRILL BIT COBALT
3/8" WITH 3/8" FLAT SHANK
LW PART NO. BA2843C



FLAT SHANK

BONDING DRILL BIT COBALT
3/8" WITH 3/8" ROUND SHANK
LW PART NO. BA2853C



ROUND SHANK

L & W INDUSTRIES

GRS (ALSTOM) PRODUCTS

MF DWARF SIGNAL

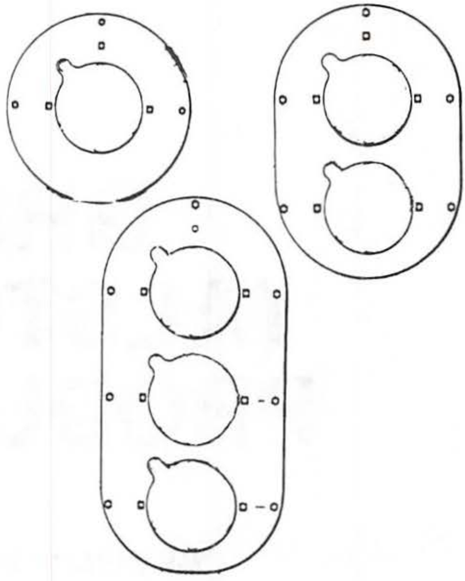
CLS TYPE D CLS REPLACEMENT PARTS

SA & SA-1 REPLACEMENT PARTS

TYPE "D" COLORLIGHT SIGNAL REPLACEMENT PARTS

BACKGROUNDS & HOODS

All L&W Hoods & Backgrounds are manufactured from galveneeled steel
and finished with a flat black powder coat paint.



1 POSITION BACKGROUND STEEL
WITH MOUNTING HARDWARE
LW PART NO. 5S4706S-X
GRS PART NO. P73-292

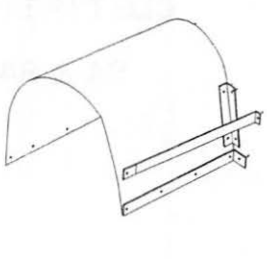
2 POSITION BACKGROUND STEEL
WITH MOUNTING HARDWARE
LW PART NO. 5S4707S-X
GRS PART NO. P73-291

3 POSITION BACKGROUND STEEL
WITH SNOW SHIELD & MOUNTING HARDWARE
LW PART NO. 5S4708S-X
GRS PART NO. P73-290

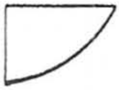
1 POSITION BACKGROUND STEEL
WITH SNOW SHIELD & MOUNTING HARDWARE
LW PART NO. 5S4706S-X

2 POSITION BACKGROUND STEEL
WITH SNOW SHIELD & MOUNTING HARDWARE
LW PART NO. 5S4707S-X

3 POSITION BACKGROUND STEEL
WITH SNOW SHIELD & MOUNTING HARDWARE
LW PART NO. 5S4708S-X



HOOD 10" STEEL
LW PART NO. 5S4715S
GRS PART NO. P73-286

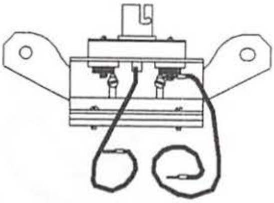


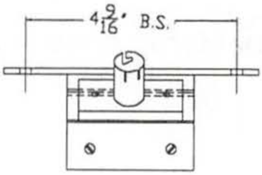
L & W INDUSTRIES

TYPE “D” COLORLIGHT SIGNAL REPLACEMENT PARTS

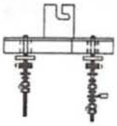
LAMP BRACKETS

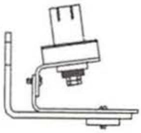
LAMP BRACKET FOR TYPE D CLS
UNFOCUSED
LW PART NO. 5Z4655-X





LAMP BRACKET FOR TYPE D CLS
PRE FOCUSED
LW PART NO. 5Z4655-XF





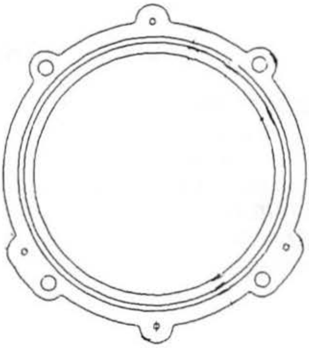
ADAPTOR RING TO CONVERT TYPE D CLS TO REAR REMOVABLE DOUBLET

The adapter ring allows you to easily convert you front removable doublet GRS Type “D” Colorlight to a rear removable doublet colorlight.

By converting to a rear removable doublet you provide you maintenance personnel with a doublet that is much easier to access from the rear.

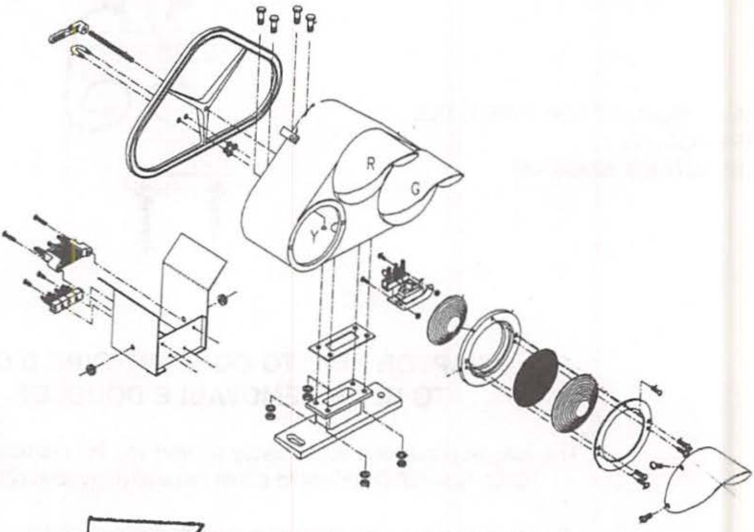
There is no need to reach out in front of the signal creating a potential safety hazard.

LW PART NO. 5Z4497

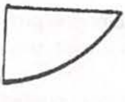


TYPE MF DWARF
COLORLIGHT SIGNAL

MF DWARF SIGNAL COLORLIGHT ASSEMBLY
WITH 10V 18W BULB
GYR ASPECTS
PREWIRED & PREFOCUSED
READY FOR INSTALLATION
LW PART NO. 5B4900-X

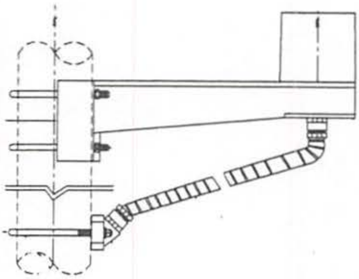


HOOD F/GRS TYPE MF & FA
LW PART NO. 5Z4703-1
GRS PART NO. P73-289



COLORLIGHT MOUNTING BRACKET

MOUNTING BRACKET FOR CLS
FRONT OR SIDE MOUNT
WITH 1-1/2" DIA EXTERNAL CONDUIT
60 DEG CONDUIT MAST COUPLING
5" MAST MOUNTING HARDWARE
LW PART NO. 5Z4600-X
GRS X-REF PART NO. A73-161



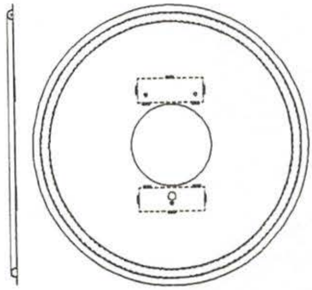
SA-1 SEARCHLIGHT REPLACEMENT PARTS

HOODS AND BACKGROUNDS

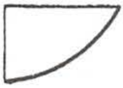
All L&W Hoods & Backgrounds are manufactured from galveneeled steel and finished with a flat black powder coat paint.

SA-1 20" DIA BACKGROUND
NO HARDWARE
LW PART NO. 5S4702S
GRS X-REF PART NO. P76-375

SA-1 36" DIA BACKGROUND
NO HARDWARE
LW PART NO. 5S4792
GRS X-REF PART NO. P76-374

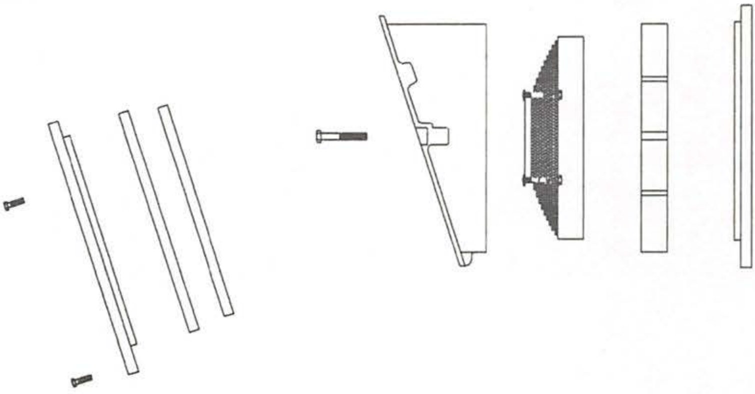


HOOD 15" LONG
NO HARDWARE
LW PART NO. 5S4701S
GRS X-REF PART NO. P76-135



PHANKILL ASSEMBLY

SLANTED PHANKILL ASSEMBLY
W/HONEYCOMB PHANKILL
LW PART NO. 5S4803-X



NOTE PAGE

US & S PRODUCTS

R2, P5, TP5 CLS PARTS

N2 DWARF CLS PARTS

H2 SEARCHLIGHT SIGNALS PARTS

HEXAGON CROSSING GATEARMS

TYPE P5, R2, TP5, N2 US&S COLORLIGHT SIGNAL REPLACEMENT PARTS

DOUBLET LENS ASSEMBLIES

DOUBLET LENS ASSEMBLY FOR
R2, P5, TP5 COLORLIGHTS
8-3/8" DIA LENSE
40 DEG DEFLECTING 4" FOCUS
LW PART NO. 5Z4535-7X#

#SPECIFY COLOR
G=GREEN Y=YELLOW R=RED L=LUNAR

DOUBLET LENS ASSEMBLY FOR
N2 DWARF COLORLIGHT
6-3/8" DIA LENSE
40 DEG DEFLECTING 3-3/4" FOCUS
LW PART NO. 5Z4630-7X#

#SPECIFY COLOR
G=GREEN Y=YELLOW R=RED L=LUNAR

LAMP BRACKET ASSEMBLIES

LAMP BRACKET ASSEMBLY FOR
P5, TP5, R2 COLORLIGHTS &
N2 DWARF
UNFOCUSED
NO BULB
LW PART NO. 5Z4669-X
LW PART NO. 5Z4669-XF (PREFOCUSED)

LAMP BRACKET ADAPTER FOR
CERAMIC BRACKET
CONVERTS REBASED CERAMIC
BRACKET S-11 SOCKET
LW PART NO. 5Z4674-1X

TYPE P5, R2, TP5, N2 US&S COLORLIGHT SIGNAL REPLACEMENT PARTS

HOODS

HOOD
FOR R2 P5 & TP5
STEEL
LW PART NO. 5Z4541S

HOOD
FOR N2
STEEL
LW PART NO. 5Z4635S

HOOD
FOR PL4
STEEL
LW PART NO. 5S4690S

BACKGROUND

BACKGROUND
FOR R2 P5 STEEL
1POS
LW PART NO. 5S4685S1X
2POS
LW PART NO. 5S4685S-2X
3POS
LW PART NO. 5S4685S-3X
4POS
LW PART NO. 5S4685S-4X

H2 H5 SEARCHLIGHT PARTS
HOOD-BACKGROUND-BRACKET-PHANKILL

HOOD
FOR H2/H5
STEEL
LW PART NO. 5S4739S
USS PART NO.

BACKGROUND
FOR H2/H5.
36" WITH SUPPORTS
TEEL
LW PART NO. 5S4717S-X
USS PART NO. M144459

36" BACK GROUND WITH HOOD
LW PART NO. 5S4717S-1X
USS PART NO. N151058

MOUNTING BRACKET
23-1/4" LONG
WITH 5" U-BOLTS
LW PART NO. 5Z4811-X

MOUNTING BRACKET
10" LONG
WITH 5" U-BOLTS
LW PART NO. 5Z4810-X

PHANKILL UNIT
HONEYCOMB
SLANTED
LW PART NO. 5Z4803-X

US&S HEXAGON CROSSING GATE ARMS-SHEAR PINS

GATEARM HEX 16FT-32FT

GATEARM HEX 16FT-32FT
ENG GRADE TAPE W/4" LAMPS
LW PART NO. 6K1440E32S4
USS PART NO. N41484-5707&5719
NO LAMPS
LW PART NO. 6K1440E32S

GATEARM HEX 16FT-32FT
HI INTENSITY GRADE TAPE W/4" LAMPS
LW PART NO. 6K1440H32S4
USS PART NO. N451484-5708&5720
NO LAMPS
LW PART NO. 6K1440H32S

GATEARM HEX 16FT-46FT
ENG GRADE TAPE WITH 4" LAMPS
LW PART NO 6K1440E46S4
USS PART NO. N451484-5719&5731
NO LAMPS
LW PART NO. 6K1440E46S

GATEARM HEX 16FT-46FT
HI INTENSITY GRADE TAPE WITH 4" LAMPS
LW PART NO. 6K1440H46S4
USS PART NO. N51484-5720&5732
NO LAMPS
LW PART NO. 6K1440H46S

SHEAR PINS

SHEAR PIN DEEP GROVE
3/8" ALUMINUM
WITH COTTER PIN
LW PART NO. 6R1571-X
USS PART NO. X451071-4709

SHEAR PIN SHALLOW GROVE
3/8" ALUMINUM
WITH COTTER PIN
LW PART NO. 6R1571-X
USS PART NO. X451071-4710

US&S REPLACEMENT GATE SECTIONS GATE LAMPS-ADAPTOR SLEEVE

REPLACEMENT BASE & SECTIONS

BASE SECTION
16FT ALUMINUM
ENG GRADE TAPE
LW PART NO. 6M1633E-SD

BASE SECTION
16FT ALUMINUM
HI INTENSITY GRADE TAPE
LW PART NO. 6M1633H-SD

SECOND SECTION
16FT FIBERGLASS
ENG GRADE TAPE
LW PART NO. 6M1634E-SD
USS PART NO. N451484-5609 & 5613

SECOND SECTION
16FT FIBERGLASS
HI INTENSITY GRADE TAPE
LW PART NO. 6M1634H-SD
USS PART NO. N451484-5610 & 5614

THIRD SECTION
16FT FIBERGLASS
ENG GRADE TAPE
LW PART NO. 6M1638E-SD
USS PART NO. N45184-5617 & 5621

THIRD SECTION
16FT FIBERGLASS
HI INTENSITY GRADE TAPE
LW PART NO. 6M1638H-SD
USS PART NO. N45184-5618 & 5622

LAMP

GATELAMP 4" WITH "L" BRACKET
LW PART NO. 6P1015-X
USS PART NO. 451071-3801

ADAPTOR

ADAPTOR SLEEVE WITH SHEAR PIN
TO MOUNT RECTANGULAR
GATE TO US&S CONVERSION BRACKET
LW PART NO. 6U1576-X

SAFETRAN PRODUCTS

CLS10 COLORLIGHT PARTS

CLS20 COLORLIGHT PARTS

FLASHING LIGHT SIGNAL PARTS

EM PEDESTAL GATE MECHANISM PARTS

EM PEDESTAL HIGH WIND GUARD

EM PEDESTAL MAST EXTENSION

EM PEDESTAL CONVERSION BRACKETS

GATEARMS & REPLACEMENT SECTIONS

CLS10 COLORLIGHT PARTS

BACKGROUND AND SNOW SHIELD
ASSEMBLY FOR 2 POSITION STYLE
CLS10 COLORLIGHT.
LW PART NO. 5Z996096-000

BACKGROUND AND SNOW SHIELD
ASSEMBLY FOR 3 POSITION STYLE
CLS10 COLORLIGHT.
LW PART NO. 5Z996181-000

LAMP BRACKET ASSEMBLY FOR
CLS10 COLORLIGHT SIGNAL.
LW PART NO. 5Z4664-1X

CLS20 COLORLIGHT PARTS

BACKGROUND AND SNOW SHIELD
ASSEMBLY FOR 2 POSITION STYLE
CLS20 COLORLIGHT.
LW PART NO. 5Z996975-000

BACKGROUND AND SNOW SHIELD
ASSEMBLY FOR 3 POSITION STYLE
CLS20 COLORLIGHT.
LW PART NO. 5Z96974-000

LAMP BRACKET ASSEMBLY FOR
CLS20 COLORLIGHT SIGNAL
LW PART NO. 5Z4669-2X

FLASHING LIGHT SIGNAL PARTS

8" SAFETRAN FLX-10 REPLACEMENT PARTS

BACKGROUND FOR 8" FLASHING
LIGHT ALUMINUM.
LW PART NO. 6B5026S

HOOD FOR 8" FLASHING LIGHT
ALUMINUM.
LW PART NO. 6B5025S

12" SAFETRAN FLX-12 REPLACEMENT PARTS

BACKGROUND FOR 12" FLASHING
LIGHT ALUMINUM, 20" DIAMETER.
LW PART NO. 6B5223S

BACKGROUND FOR 12" FLASHING
LIGHT ALUMINUM, 24" DIAMETER.
LW PART NO. 6B5226S

HOOD FOR 12" FLASHING LIGHT
ALUMINUM.
LW PART NO. 6B5224S

EM PEDESTAL GATE MECHANISM

FLASHING LIGHT SIGNAL ASSEMBLY

FLASHING LIGHT SIGNAL ASSEMBLY
FOR EM PEDESTAL GATE MECHANISM.
WITH TWO WAY 12" LIGHTS.
LW PART NO. 6A5290-X

EM PEDESTAL GATE FLASHING LIGHT SIGNAL ASSEMBLY IS SHIPPED WITH BASE FOR MOUNTING ON TOP OF THE PEDESTAL GATE, 4" SIGNAL POLE, PRE-WIRED JUNCTION BOX CROSSARM WITH 12" LIGHTS AND PINNACLE.

HIGH WIND GUARDS

HIGH WIND GUARD AND MAST
EXTENSION FOR EM PEDESTAL
GATE MECHANISM.
LW PART NO. 6U5544-X

HIGH WIND GUARD FOR EM
PEDESTAL GATE MECHANISM.
LW PART NO. 6U5570-X

EM PEDESTAL GATE MECHANISM

CONVERSION BRACKET AND BREAKAWAY ASSEMBLIES

CONVERSION BRACKET WITH CAST
BREAKAWAY FOR EM PEDESTAL
GATE MECHANISM.
LW PART NO. 6R1622-X

CONVERSION BRACKET AND
FABRICATED BREAKAWAY FOR
EM PEDESTAL GATE MECHANISM.
LW PART NO. 6R1623-X

GATEARMS & REPLACEMENT SECTIONS

COMPLETE GATEARMS

The following L&W gatearms can be used in place of the Safetran Series gates listed.

The L&W gatearms come complete ready for installation with 4" lamps
(no drilling required for mounting lamps to gate), adaptor sleeve & mounting hardware.

DESCRIPTION	SAFETRAN P/N	LW P/N	CAT PAGE
16ft-32ft Fiberglass	076500-##	6K1425E32T4 (Eng Grade Tape)	56
		6K1425H32T4 (High Intensity Tape)	56
16ft-32ft Alum/Fiberglass	076600-##	6K1400E32T4 (Eng Grade Tape)	54
		6K1400H32T4 (High Intensity Tape)	54

REPLACEMENT SECTIONS

DESCRIPTION	SAFETRAN P/N	LW P/N	CAT PAGE
16ft Fiberglass Base	076250-506X	6M1560E-SD (Eng Grade Tape)	57
		6M1560H-SD (High Intensity Tape)	57
16ft Fiberglass 2nd Sect	076251-502X	6M1562E-SD (Eng Grade Tape)	55-57
		6M1562H-SD (High Intensity Tape)	55-57
8ft Fiberglass 2nd Sect		6M1562E-8SD (Eng Grade Tape)	55-57
		6M1562H-8SD (High Intensity Tape)	55-57
16ft Fiberglass 3nd Sect		6M1563E-SD (Eng Grade Tape)	55-57
		6M1563H-SD (High Intensity Tape)	55-57
8ft Fiberglass 3rd Sect		6M1563E-8SD (Eng Grade Tape)	55-57
		6M1563H-8SD (High Intensity Tape)	55-57

L & W INDUSTRIES

WESTERN CULLEN PRODUCTS

PRODUCT X-REFERENCE GUIDE

8" & 12" FLASHER PARTS

CROSSING GATEARM PARTS

CROSSING GATEARM PARTS

CONVERSION BRACKETS AND BREAKAWAYS

BREAKAWAY SUPPORT SLEEVE, FOR
WESTERN CONVERSION BRACKETS.
INCLUDING SHEAR PIN ASSEMBLY.
LW PART NO. 6R1576-X

CONVERSION BRACKET / CONVERSION
KIT. MODIFIES A STANDARD WESTERN
CONVERSION BRACKET TO A PIVOT PIN
TYPE CONVERSION BRACKET.
LW PART NO. 6R1624-X

SHEAR PIN, ALUMINUM FOR GATEARMS
32' AND UNDER.
LW PART NO. 6R1571-X

SHEAR PIN, ALUMINUM FOR GATEARMS
32' AND OVER.
LW PART NO. 6R1572-X

8" AND 12" FLASHING LIGHT SIGNAL PARTS

WC950 8" FLASHING LIGHT PARTS

CONVERSION KIT TO ADAPT WESTERN
TYPE 950, 8" LIGHT TO STANDARD
CROSSARM ASSEMBLIES.
LW PART NO. 6B6201-X

BACKGROUND 8", FOR WC950
FLASHING LIGHT SIGNAL UNIT.
LW PART NO. 6B5018-1

HOOD 8", FOR WC950 FLASHING
LIGHT SIGNAL UNIT.
LW PART NO. 6B5019-1

RETAINING RING, FOR WC950
FLASHING LIGHT SIGNAL UNIT.
LW PART NO. 6B5020

WC960 8" FLASHING LIGHT PARTS

BACKGROUND 8", FOR WC960
FLASHING LIGHT UNIT.
LW PART NO. 5Z5018-1

HOOD 8", FOR WC960
FLASHING LIGHT UNIT.
LW PART NO. 5Z5013-1

GASKET, LENS WC960
FLASHING LIGHT
LW PART NO. 6B5020A

WC970 12" FLASHING LIGHT PARTS

BACKGROUND 12", FOR WC970
FLASHING LIGHT UNIT.
LW PART NO. 6B5218

HOOD 12", FOR WC970
FLASHING LIGHT UNIT.
LW PART NO. 6B5219

NOTE PAGE

CATALOG INDEX

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION A WAYSIDE SIGNAL		**5**				
ADAPTOR Mast f/Conduit	5Z4603-X	10				
BACKGROUND f/ 1 Pos L&W 4500 Cls	5Z4525S	14				
BACKGROUND f/ 1 Pos L&W 8000 Cls	5Z8500S	14				
BACKGROUND f/ 2 Pos L&W 4500 Cls	5Z4526S	14				
BACKGROUND f/ 2 Pos L&W 8000 Cls	5Z8550S	14				
BACKGROUND f/ 3 Pos L&W 4500 Cls	5Z4527S	14				
BACKGROUND f/ 3 Pos L&W 8000 Cls	5Z8600S	14				
BACKGROUND f/ 3 Pos tRI L&W 4540 Cls	5Z4540S	14				
BACKGROUND f/ 4 Pos L&W 4500 Cls	5Z4528S	14				
BACKGROUND f/ 4 Pos L&W 8000 Cls	5Z8650S	14				
CLS ASBLY COMPLETE w/CLS Heads w/Fab Base&Safty Platf(All Alum)	5A4620	22				
CLS ASSEMBLIES COMPLETE w/L&W 8000 Cls Mast Ladder Platforms	5A4610	16				
CLS BULB BKT f/L&W 8000,4500, 4540 Cls & 4600 Dwf	5Z4669-1X	11				
CLS DOUBLET Asbly f/L&W 4500 Cls	5Z4535-X#	11				
CLS DOUBLET Asbly f/L&W 4630 Dwf	5Z4630-8X#	11				
CLS DOUBLET Asbly f/L&W 8000 Cls	5Z4535-5X#	11				
CLS MOUNTING BRACKET Tube Type	5Z4609-X	10	042256-4X			
CLS MOUNTING BRACKET Tube Type Bk to Bk	5Z4609-2X	10	042256-6X			
CLS MOUNTING BRACKET w/Conduit	5Z4600-X	10				
CLS MOUNTING BRACKET w/Conduit Bk-Bk	5Z4600-2X	10				
CLS PHANKILL f/L&W 8000,4500, 4540 Cls Slanted	5S4800-X	12		X388096		
CLS PHANKILL f/L&W 8000,4500, 4540 Cls Straight	5S4803-X	12				
CLS STACKED 8-3/8" DIA 1 POSITION w/Rear Removable Doublet	5D8100#	6	CLS-20R		A73-921	
CLS STACKED 8-3/8" DIA 2 POSITION w/Rear Removable Doublet	5D8200#	6	CLS-20R		A73-922	
CLS STACKED 8-3/8" DIA 3 POSITION w/Rear Removable Doublet	5D8300#	6	CLS-20R		A73-919	
CLS STACKED 8-3/8" DIA 4 POSITION w/Rear Removable Doublet	5D8400#	6	CLS-20R			
CLS STACKED LED 8-3/8" DIA 2 POSITION w/Rear Removable Doublet	5D9002#	6				
CLS STACKED LED 8-3/8" DIA 1 POSITION w/Rear Removable Doublet	5D9001#	6				
CLS STACKED LED 8-3/8" DIA 3 POSITION w/Rear Removable Doublet	5D9003#	6				
CLS STACKED LED 8-3/8" DIA 4 POSITION w/Rear Removable Doublet	5D9004#	6				
CLS TRIANGULAR 8-3/8" DIA 1 POSITION	5D4541#	8	V-20			
CLS TRIANGULAR 8-3/8" DIA 2 POSITION	5D4542#	8	V-20			
CLS TRIANGULAR 8-3/8" DIA 3 POSITION	5D4543#	8	V-20			
DWARF CLS ADJ BASE 6-3/8" DIA 1 POSITION	5B4631A-#	15	CLS-10D			
DWARF CLS ADJ BASE 6-3/8" DIA 2 POSITION	5B4632A-#	15	CLS-10D			
DWARF CLS ADJ BASE 6-3/8" DIA 3 POSITION	5B4633A-#	15	CLS-10D			
DWARF CLS ADJ BASE 6-3/8" DIA 4 POSITION	5B4634A-#	15	CLS-10D			
DWARF CLS ADJ BASE 8-3/8" DIA 1 POSITION	5B4641A-#	15				
DWARF CLS ADJ BASE 8-3/8" DIA 2 POSITION	5B4642A-#	15				
DWARF CLS ADJ BASE 8-3/8" DIA 3 POSITION	5B4643A-#	15				
DWARF CLS ADJ BASE 8-3/8" DIA 4 POSITION	5B4644A-#	15				
DWARF CLS FIX BASE 6-3/8" DIA 1 POSITION	5B4631F-#	15	CLS-10D			
DWARF CLS FIX BASE 6-3/8" DIA 2 POSITON	5B4632F-#	15	CLS-10D			
DWARF CLS FIX BASE 6-3/8" DIA 3 POSITION	5B4633F-#	15	CLS-10D			
DWARF CLS FIX BASE 6-3/8" DIA 4 POSITION	5B4634F-#	15	CLS-10D			
DWARF CLS FIX BASE 8-3/8" DIA 1 POSITION	5B4641F-#	15				
DWARF CLS FIX BASE 8-3/8" DIA 2 POSITION	5B4642F-#	15				
DWARF CLS FIX BASE 8-3/8" DIA 3 POSITION	5B4643F-#	15				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION A WAYSIDE SIGNAL		5				
HOOD f/L&W 4500 Cls	5Z4695S	14				
HOOD f/L&W 4600 Dwf	5Z4635S	14				
HOOD f/L&W 8000 Cls	5Z8549S	14				
HOUSE TOP LOADED 3x4 f/Wayside Signals	1A40600	24				
HOUSE TOP LOADED 4x6 f/Wayside Signals	1A30400	24				
LADDER & 1 PLATFORM ASBLY f/Cls (No Mast or Base)	5J7461	19	061021-LPX			
LADDER & 2 PLATFORM ASBLY f/Cls (No Mast or Base)	5J7462	19		061022-LPX		
LADDER & 3 PLATFORM ASBLY f/Cls (No Mast or Base)	5J7463	19	061024-LPX			
LADDER BASE f/8" Signal Ladder	5J7410-X	21	61000		A76-327	
LADDER GUARD 1 SIDE f/8" Signal Ladder	5J7407-1X	21				
LADDER GUARD 2 SIDE f/8" Signal Ladder	5J7407-2X	21				
LADDER SECTION 5ft Galv f/Signal Ladder	5J7510-5X	21				
LADDER SECTION 7ft Galv f/Signal Ladder	5J7510-7X	21				
LADDER SECTION 9ft Galv f/Signal Ladder	5J7510-9X	21				
MAST 5" DIA ALUM f/ Cls	5L7800-790020	21				
MAST COVER PLATE ONE SLOT f/5" Signal Mast	5Z7428-2X	21				
MAST COVER PLATE TWO SLOT f/5" Signal Mast	5Z7428-1X	21				
MAST LADDER 1 PLATFORM JB ASBLY f/Cls	5G7401	17	061021-AX			
MAST LADDER 1 SAFETY PLATFORM ASBLY w/Fab Base f/Cls (All Alum)	5G7601	23				
MAST LADDER 2 PLATFORM JB ASBLY f/Cls	5G7402	17	061022-AX			
MAST LADDER 2 SAFETY PLATFORM ASBLY w/Fab Base f/Cls (All Alum)	5G7602	23				
MAST LADDER 3 PLATFORM JB ASBLY f/Cls	5G7403	17	061024-AX			
MAST LADDER 3 SAFETY PLATFORM ASBLY w/Fab Base f/ Cls (All Alum)	5G7603	23				
MAST RODENT PLATE f/5" Signal Mast	5Z5554	21				
NUMBER DIGIT "0" BLACK NO. ON WHITE	7A1094-0	27	036227-58-1			
NUMBER DIGIT "0" BLACK NO. ON WHITE	7A1095-0	27				
NUMBER DIGIT "0" WHITE NO. ON BLACK	7A1096-0	27				
NUMBER DIGIT "1" BLACK NO. ON WHITE	7A1094-1	27	036227-58-2			
NUMBER DIGIT "1" BLACK NO. ON WHITE f/Dwf	7A1095-1	27				
NUMBER DIGIT "1" WHITE NO. ON BLACK	7A1096-1	27				
NUMBER DIGIT "2" BLACK NO. ON WHITE	7A1094-2	27	036227-58-3			
NUMBER DIGIT "2" BLACK NO. ON WHITE f/Dwf	7A1095-2	27				
NUMBER DIGIT "2" WHITE NO. ON BLACK	7A1096-2	27				
NUMBER DIGIT "3" BLACK NO. ON WHITE	7A1094-3	27	036227-58-4			
NUMBER DIGIT "3" BLACK NO. ON WHITE f/Dwf	7A1095-3	27				
NUMBER DIGIT "3" WHITE NO. ON BLACK	7A1096-3	27				
NUMBER DIGIT "4" BLACK NO. ON WHITE	7A1094-4	27	036227-58-5			
NUMBER DIGIT "4" BLACK NO. ON WHITE f/Dwf	7A1095-4	27				
NUMBER DIGIT "4" WHITE NO. ON BLACK	7A1096-4	27				
NUMBER DIGIT "5" BLACK NO. ON WHITE	7A1094-5	27	036227-58-6			
NUMBER DIGIT "5" BLACK NO. ON WHITE f/Dwf	7A1095-5	27				
NUMBER DIGIT "5" WHITE NO. ON BLACK	7A1096-5	27				
NUMBER DIGIT "6" BLACK NO. ON WHITE	7A1094-6	27	036227-58-7			
NUMBER DIGIT "6" BLACK NO. ON WHITE f/Dwf	7A1095-6	27				
NUMBER DIGIT "6" WHITE NO. ON BLACK	7A1096-6	27				
NUMBER DIGIT "7" BLACK NO. ON WHITE	7A1094-7	27	036227-58-8			
NUMBER DIGIT "7" BLACK NO. ON WHITE f/Dwf	7A1095-7	27				
NUMBER DIGIT "7" WHITE NO. ON BLACK	7A1096-7	27				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION A WAYSIDE SIGNAL		5				
NUMBER DIGIT "8" BLACK NO. ON WHITE	7A1094-8	27	036227-58-9			
NUMBER DIGIT "8" BLACK NO. ON WHITE f/Dwf	7A1095-8	27				
NUMBER DIGIT "8" WHITE NO. ON BLACK	7A1096-8	27				
NUMBER DIGIT "9" BLACK NO. ON WHITE	7A1094-9	27	036227-58-0			
NUMBER DIGIT "9" BLACK NO. ON WHITE f/Dwf	7A1095-9	27				
NUMBER DIGIT "9" WHITE NO. ON BLACK	7A1096-9	27				
NUMBER PLATE 3 DIGIT 1 WAY HORZ f/Sigs w/5" Hdw	7A1097-35	26	036117-582-3			
NUMBER PLATE 3 DIGIT 1 WAY VERT f/Sigs w/5" Hdw	7A1092-35	26	036227-581-3			
NUMBER PLATE 3 DIGIT 2 WAY HORZ f/Sigs w/5" Hdw	7A1097BB-35	26				
NUMBER PLATE 3 DIGIT 2 WAY VERT f/Sigs w/5" Hdw	7A1092BB-35	26				
NUMBER PLATE 4 DIGIT 1 WAY HORZ f/Dwf	7A1101	27				
NUMBER PLATE 4 DIGIT 1 WAY HORZ f/Sigs w/5" Hdw	7A1097-45	26	036117-582-4			
NUMBER PLATE 4 DIGIT 1 WAY VERT f/Sigs w/5" Hdw	7A1092-45	26	036227-581-4			
NUMBER PLATE 4 DIGIT 2 WAY HORZ f/Sigs w/5" Hdw	7A1097BB-45	26				
NUMBER PLATE 4 DIGIT 2 WAY VERT f/Sigs w/5" Hdw	7A1092BB-45	26				
NUMBER PLATE 5 DIGIT 1 WAY HORZ f/Sigs w/5" Hdw	7A1097-55	26	036117-582-5			
NUMBER PLATE 5 DIGIT 1 WAY VERT f/Sigs w/5" Hdw	7A1097BB-55	26				
NUMBER PLATE 5 DIGIT 2 WAY VERT f/Sigs w/5" Hdw	7A1092BB-55	26				
PINNACLE 5" f/Cls Asbly w/Set Bolt	5Z7500-X	20		J026104	P76-254	110-A-8
SIGN "BEGIN CTC" BLACK ON WHITE 5" Hdw	7A1078E5	28				
SIGN "BEGIN CTC" BLACK ON WHITE No Hdw	7A1078E	28				
SIGN "BEGIN CTC" BLACK ON WHITE w/2" Hdw	7A1078E2	28				
SIGN "D" DISTANCE BLACK ON WHITE No Hdw	7A1055E	28				
SIGN "D" DISTANCE BLACK ON WHITE w/5" Hdw	7A1055E5	28				
SIGN "END CTC" BLACK ON WHITE No Hdw	7A1079E	28				
SIGN "END CTC" BLACK ON WHITE w/2" Hdw	7A1079E2	28				
SIGN "END CTC" BLACK ON WHITE w/5" Hdw	7A1079E5	28				
SNOWSHIELD & BACKGROUND f/ 1 Pos L&W 4500 Cls	5Z4722-X	13				
SNOWSHIELD & BACKGROUND f/ 1 Pos L&W 8000 Cls	5Z4731-X	13				
SNOWSHIELD & BACKGROUND f/ 2 Pos L&W 4500 Cls	5Z4721-X	13				
SNOWSHIELD & BACKGROUND f/ 2 Pos L&W 8000 Cls	5Z4732-X	13				
SNOWSHIELD & BACKGROUND f/ 3 Pos L&W 4500 Cls	5Z4720-X	13				
SNOWSHIELD & BACKGROUND f/ 3 Pos L&W 8000 Cls	5Z4733-X	13				
SNOWSHIELD & BACKGROUND f/ 4 Pos L&W 4500 Cls	5Z4734-X1	13				
SNOWSHIELD & BACKGROUND f/ 4 Pos L&W 8000 Cls	5Z4734-X	13				
SNOWSHIELD Only f/ 1 Pos L&W 4500 Cls	5Z4722-X1	13				
SNOWSHIELD Only f/ 1 Pos L&W 8000 Cls	5Z4722-2X	13				
SNOWSHIELD Only f/ 2 Pos L&W 4500 Cls	5Z4721-X1	13				
SNOWSHIELD Only f/ 2 Pos L&W 8000 Cls	5Z4721-2X	13				
SNOWSHIELD Only f/ 3 Pos L&W 4500 Cls	5Z4720-X1	13				
SNOWSHIELD Only f/ 3 Pos L&W8000 Cls	5Z4720-2X	13				
SNOWSHIELD Only f/ 4 Pos L&W 4500 Cls	5Z4734-1X	13				
SNOWSHIELD Only f/ 4 Pos L&W8000 Cls	5Z4734-2X	13				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		**29**				
BACKGROUND f/ Safetran FLX12 12" Dia Flasher 20" Dia Steel	6B5223S-X	38	042004-21X			
BACKGROUND FLASHER f/Safetran FLX10 8" Dia Flasher 20" Dia Steel	6B5025S	38	042004-X			
BOLT SPLIT 10" MAST f/MTG X-ARM w/Bracket & Hdw	7A1048-4X	43				
BOLT SPLIT 12" MAST f/MTG X-ARM w/Bracket & Hdw	7A1048-5X	43				
BOLT SPLIT 6" MAST f/MTG X-ARM w/Bracket & Hdw	7A1048-2X	43				
BOLT SPLIT 8" MAST f/MTG X-ARM w/Bracket & Hdw	7A1048-3X	43				
ELBOW SUPPORT CLAMP TYPE f/X-ARM	6B6005-X	43		0421264-1		960-A-163
ELBOW SUPPORT THREADED TYPE f/X-ARM	6B6009-X	43				
EXTENSION X-ARM CLAMP TYPE 11" LONG w/No Offset	6B6004-6	44				950-A-37
EXTENSION X-ARM CLAMP TYPE 16-1/2" LONG No Offset	6B6004-5	44				950-A-46
EXTENSION X-ARM CLAMP TYPE 16-1/4" LONG w/12" Offset	6B6004-2	44				950-A-77
EXTENSION X-ARM CLAMP TYPE 16-1/4" LONG w/4-7/8" Offset	6B6004-1	44				950-A-67
EXTENSION X-ARM CLAMP TYPE 3-1/2" LONG w/No Offset	6B6004	44				950-A-57
EXTENSION X-ARM CLAMP TYPE 5-1/2" LONG w/No Offset	6B6004-8	44				950-A-36
EXTENSION X-ARM CLAMP TYPE 8-1/4" LONG w/12" Offset	6B6004-3	44				950-A-76
EXTENSION X-ARM CLAMP TYPE 8-1/4" LONG w/4-7/8" Offset	6B6004-4	44				950-A-66
EXTENSION X-ARM CLAMP TYPE 9-1/2" LONG w/No Offset	6B6004-7	44				950-A-47
EXTENSION X-ARM THREADED TYPE 11" LONG w/No Offset	6B6004-6T	44				
EXTENSION X-ARM THREADED TYPE 16-1/2" LONG w/No Offset	6B6004-5T	44				
EXTENSION X-ARM THREADED TYPE 16-1/4" LONG w/12" Offset	6B6004-2T	44				
EXTENSION X-ARM THREADED TYPE 16-1/4" LONG w/4-7/8" Offset	6B6004-1T	44				
EXTENSION X-ARM THREADED TYPE 3-1/2" LONG w/No Offset	6B6004-T	44				
EXTENSION X-ARM THREADED TYPE 5-1/2" LONG w/No Offset	6B6004-8T	44				
EXTENSION X-ARM THREADED TYPE 8-1/4" LONG w/12" Offset	6B6004-3T	44				
EXTENSION X-ARM THREADED TYPE 8-1/4" LONG w/4-7/8" Offset	6B6004-4T	44				
EXTENSION X-ARM THREADED TYPE 9-1/2" LONG w/12" Offset	6B6004-7T	44				
FLASHER "NO LEFT TURN LIGHT" w/8" Marker Light 4" Mast & Junction Box	6A5080-XL	53				A-534-L
FLASHER "NO LEFT TURN LIGHT" w/8" Marker Light 5" Mast & Junction Box	6A5080-1XL	53				
FLASHER "NO RIGHT TURN LIGHT" w/8" Marker Light 4" Mast & Junction Box	6A5080-XR	53				A-534-R
FLASHER "NO RIGHT TURN LIGHT" w/8" Marker Light 5" Mast & Junction Box	6A5080-1XR	53				
FLASHER & X-ARM ASBLY 12" 1 WAY f/10" Mast	6A6210-4X	39				
FLASHER & X-ARM ASBLY 12" 1 WAY f/12" Mast	6A6210-5X	39				
FLASHER & X-ARM ASBLY 12" 1 WAY f/4" Mast	6A6210-X	39				975-412
FLASHER & X-ARM ASBLY 12" 1 WAY f/5" Mast	6A6210-1X	39				975-414
FLASHER & X-ARM ASBLY 12" 1 WAY f/8" Mast	6A6210-3X	39				
FLASHER & X-ARM ASBLY 12" 2 WAY f/10" Mast	6A6215-4X	39				
FLASHER & X-ARM ASBLY 12" 2 WAY f/10" Mast w/Gate	6A6232-4X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/10" Mast w/Gate	6A6247-4X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/12" Mast	6A6215-5X	39				
FLASHER & X-ARM ASBLY 12" 2 WAY f/12" Mast w/Gate	6A6232-5X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/12" Mast w/Gate	6A6247-5X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/4" Mast	6A6215-X	39				975-418
FLASHER & X-ARM ASBLY 12" 2 WAY f/4" Mast w/Gate	6A6232-X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/4" Mast w/Gate	6A6247-X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/5" Mast	6A6215-1X	39				975-418
FLASHER & X-ARM ASBLY 12" 2 WAY f/5" Mast w/Gate	6A6232-1X	40				975-304
FLASHER & X-ARM ASBLY 12" 2 WAY f/5" Mast w/Gate	6A6247-1X	40				975-311

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		**29**				
FLASHER & X-ARM ASBLY 12" 2 WAY f/8" Mast w/Gate	6A6232-3X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/8" Mast w/Gate	6A6232-3X	40				
FLASHER & X-ARM ASBLY 12" 2 WAY f/8" Mast w/Gate	6A6247-3X	40				
FLASHER & X-ARM ASBLY 12" LED 1 WAY f/10" Mast	6A6210-4XL	39				
FLASHER & X-ARM ASBLY 12" LED 1 WAY f/12" Mast	6A6210-5XL	39				
FLASHER & X-ARM ASBLY 12" LED 1 WAY f/4" Mast	6A6210-XL	39				
FLASHER & X-ARM ASBLY 12" LED 1 WAY f/5" Mast	6A6210-1XL	39				
FLASHER & X-ARM ASBLY 12" LED 1 WAY f/8" Mast	6A6210-3XL	39				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/10" Mast	6A6215-4XL	39				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/10" Mast w/Gate	6A6232-4XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/10" Mast w/Gate	6A6247-4XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/12" Mast	6A6215-5XL	39				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/12" Mast w/Gate	6A6232-5XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/12" Mast w/Gate	6A6247-5XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/4" Mast	6A6215-XL	39				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/4" Mast w/Gate	6A6232-XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/4" Mast w/Gate	6A6247-XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/5" Mast	6A6215-1XL	39				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/5" Mast w/Gate	6A6232-1XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/5" Mast w/Gate	6A6247-1XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/8" Mast	6A6215-3XL	39				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/8" Mast w/Gate	6A6232-3XL	40				
FLASHER & X-ARM ASBLY 12" LED 2 WAY f/8" Mast w/Gate	6A6247-3XL	40				
FLASHER ASSEMBLIES COMPLETE 4" MAST 1 Way & 2 Way		31				
FLASHER ASSEMBLIES COMPLETE 4" MAST 1 Way & 2 Way w/Side Lights		32				
FLASHER ASSEMBLIES COMPLETE 5" MAST 1 Way & 2 Way		33				
FLASHER ASSEMBLIES COMPLETE 5" MAST 1 Way & 2 Way w/Side Lights		34				
FLASHER ASSEMBLIES COMPLETE W/Gate Mechanism 5" MAST		35				
FLASHER BULB SOCKET f/8" or 12" Flasher w/wire leads	6P5012-X	38				
FLASHER LENSE RED 12" LEXAN 15-30 DEGREE	7B5292	37				
FLASHER LENSE RED 12" LEXAN 20-32 DEGREE	7B5293	37				
FLASHER LENSE RED 12" LEXAN 70 DEGREE	7B5294	37				
FLASHER LENSE RED 8" LEXAN 15-30 DEGREE	7B5094	37				
FLASHER LENSE RED 8" LEXAN 20-32 DEGREE	7B5093	37				
FLASHER LENSE RED 8" LEXAN 70 DEGREE	7B5092	37				
FLASHER MIRROR 12" GLASS DEEP DISH	6B6206	37				
FLASHER MIRROR 12" GLASS SHALLOW DISH	6B5206	37				
FLASHER MIRROR 12" PLASTIC SHALLOW DISH	6B6207	37				
FLASHER MIRROR 8" GLASS	6B5006	37				
FLASHER MIRROR 8" PLASTIC	6B5006-1	37				
FLASHER ONLY 12" INCANDESCENT	B6200-X	36				
FLASHER ONLY 12" LED	6B6200-XL	36				
FLASHER PEDESTRIAN 7" Light Replacement Kit	6B5181-X	53				
FLASHER PEDESTRIAN w/7" Lights Mast JB Base	6A5180-5X	53				
FLASHER PEDESTRIAN w/7" Lights Mast JB Base Standoff f/ Bell No Bell	6A5180-6X	53				
FLASHER PEDESTRIAN w/7" Lights Mast JB Base Standoff f/ Bell w/Mech Bell	6A5180-7X	53				
FLASHER SIDE LIGHT LENS f/8" or 12" Flasher	7B6203	38				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		29				
GATEARM CORD 2C #16 SJO SWO	DA6640	61				
GATEARM 16'-32' AG1 ALUM/FIBER ADJ ENGINEERING TAPE No Lights	6K1400E32T	54				38-2503-32
GATEARM 16'-32' AG1 ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights	6K1400E32T4	54	076600-3200			38-2503-70
GATEARM 16'-32' AG1 ALUM/FIBER ADJ HI INTENSITY TAPE No Lights	6K1400H32T	54				38-2504-32
GATEARM 16'-32' AG1 ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights	6K1400H32T4	54				38-2504-70
GATEARM 16'-32' ALL FIBERGLASS ADJ ENGINEERING TAPE No Lights	6K1425E32T	56				38-2501-32
GATEARM 16'-32' ALL FIBERGLASS ADJ ENGINEERING TAPE w/4" Lights	6K1425E32T4	56	076500-3200			38-2501-70
GATEARM 16'-32' ALL FIBERGLASS ADJ ENGINEERING TAPE W/4" Lights	6K1425E32T4	56				
GATEARM 16'-32' ALL FIBERGLASS ADJ HI INTENSITY TAPE No Lights	6K1425H32T	56				38-2502-32
GATEARM 16'-32' ALL FIBERGLASS ADJ HI INTENSITY TAPE w/4" Lights	6K1425H32T4	56				38-2502-70
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE No Lights	6K1440E32T	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE No Lights f/Hex Cast Breakaway	6K1442E32T	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights	6K1440E32T4	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights f/Hex Cast Breakaway	6K1442E32T4	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE No Lights	6K1440H32T	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE No Lights f/HexvCast Breakaway	6K1442H32T	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights	6K1440H32T4	58				
GATEARM 16'-32' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights f/Hex Cast Breakaway	6K1442H32T4	58				
GATEARM 16'-46' AG1 ALUM/FIBER ADJ ENGINEERING TAPE No Lights Cables Buffer Leg	6K1400E46T	54				38-2503-40
GATEARM 16'-46' AG1 ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights Cables Buffer Leg	6K1400E46T4	54	076600-4000			38-2503-90
GATEARM 16'-46' AG1 ALUM/FIBER ADJ HI INTENSITY TAPE No Lights Cables Buffer Leg	6K1400H46T	54				38-2504-40
GATEARM 16'-46' AG1 ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights Cables Buffer Leg	6K1400H46T4	54				38-2504-90
GATEARM 16'-46' ALL FIBERGLASS ADJ ENGINEERING TAPE No Lights Cables Buffer Leg	6K1425E46T	56				38-2501-40
GATEARM 16'-46' ALL FIBERGLASS ADJ ENGINEERING TAPE w/4" Lights Cables Buffer Leg	6K1425E46T4	56	076500-4000			38-2501-90
GATEARM 16'-46' ALL FIBERGLASS ADJ HI INTENSITY TAPE No Lights Cables Buffer Leg	6K1425H46T	56				38-2502-40
GATEARM 16'-46' ALL FIBERGLASS ADJ HI INTENSITY TAPE w/4" Lights Cables Buffer Leg	6K1425H46T4	56				38-2502-90
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE No Lights	6K1440E46T	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE No Lights f/Hex Cast Breakaway	6K1442E46T	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights	6K1440E46T4	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights f/Hex Cast Breakaway	6K1442E46T4	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE No Lights	6K1440H46T	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE No Lights f/Hex Cast Breakaway	6K1442H46T	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights	6K1440H46T4	58				
GATEARM 16'-46' HI WIND ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights f/Hex Cast Breakaway	6K1442H46T4	58				
GATEARM 2ND SECTION 16' FIBERGLASS ENGINEERING TAPE No Hdw	6M1562E-TD	55				
GATEARM 2ND SECTION 16' FIBERGLASS ENGINEERING TAPE No Hdw	6M1562E-SD	57	076251-501X			38-2501-03
GATEARM 2ND SECTION 16' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1562H-TD	55				
GATEARM 2ND SECTION 16' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1562H-SD	57				38-2502-03
GATEARM 2ND SECTION 16' HI WIND FIBERGLASS ENGINEERING TAPE No Hdw	6M1634E-8SD	59				
GATEARM 2ND SECTION 16' HI WIND FIBERGLASS HI INTENSITY TAPE No Hdw	6M1634H-8SD	59				
GATEARM 2ND SECTION 8' FIBERGLASS ENGINEERING TAPE No Hdw	6M1562E-8TD	55				
GATEARM 2ND SECTION 8' FIBERGLASS ENGINEERING TAPE No Hdw	6M1562E-8SD	57	0762510500X			38-2501-08
GATEARM 2ND SECTION 8' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1562H-8TD	55				
GATEARM 2ND SECTION 8' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1562H-8SD	57				38-2502-08
GATEARM 2ND SECTION 8' HI WIND FIBERGLASS ENGINEERING TAPE No Hdw	6M1634E-8SD	59				
GATEARM 2ND SECTION 8' HI WIND FIBERGLASS HI INTENSITY TAPE No Hdw	6M1634H-8SD	59				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		29				
GATEARM 3RD SECTION 16' FIBERGLASS ENGINEERING TAPE No Hdw	6M1563E-TD	55				
GATEARM 3RD SECTION 16' FIBERGLASS ENGINEERING TAPE No Hdw	6M1563E-SD	57				
GATEARM 3RD SECTION 16' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1563H-TD	55				
GATEARM 3RD SECTION 16' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1563H-SD	57				
GATEARM 3RD SECTION 16' HI WIND FIBERGLASS ENGINEERING TAPE No Hdw	6M1638E-SD	59				
GATEARM 3RD SECTION 16' HI WIND FIBERGLASS HI INTENSITY TAPE No Hdw	6M1638H-SD	59				
GATEARM ADAPTOR SLEEVE Alum 12" Long f/Alum Fiberglass & Fiberglass Gates	6U1564	61				
GATEARM ADAPTOR SLEEVE Alum 3' Long f/Alum Fiberglass & Fiberglass Gates	6U1564-3	61				
GATEARM ADAPTOR SLEEVE Alum 4' Long f/Alum Fiberglass & Fiberglass Gates	6U1564-4	61				
GATEARM ADAPTOR SLEEVE Alum 8' Long f/Alum Fiberglass & Fiberglass Gates	6U1564-8	61				
GATEARM BASE SECTION 16' ALUM ENGINEERING TAPE No Hdw	6M1561E-TD	55	076250-505X			38-2503-01
GATEARM BASE SECTION 16' ALUM HI INTENSITY TAPE No Hdw	6M1561H-TD	55				38-2504-01
GATEARM BASE SECTION 16' FIBERGLASS ENGINEERING TAPE No Hdw	6M1560E-SD	57	076250-506X			38-2501-01
GATEARM BASE SECTION 16' FIBERGLASS HI INTENSITY TAPE No Hdw	6M1560H-SD	57				38-2502-01
GATEARM BASE SECTION 16' HI WIND ALUM ENGINEERING TAPE f/Hex Cast Bkwy No Hdw	6M1633E-1SD	59				
GATEARM BASE SECTION 16' HI WIND ALUM ENGINEERING TAPE f/Shear Pin No Hdw	6M1633E-SD	59				
GATEARM BASE SECTION 16' HI WIND ALUM HI INTENSITY TAPE f/Hex Cast Bkwy No Hdw	6M1633H-1SD	59				
GATEARM BASE SECTION 16' HI WIND ALUM HI INTENSITY TAPE f/Shear Pin No Hdw	6M1633H-SD	59				
GATEARM BREAKAWAY FABRICATED w/3ea Shear Bolts	6R1573-X	67	076203-510X			
GATEARM BREAKWAY CAST HEXAGON f/Hi Wind Gate w/3ea Shear Bolts	6R1574-5X	67				
GATEARM BREAKWAY CAST W/3ea Shear Bolts	6R1574-X	67	076203-510X			
GATEARM BUFFER LEG f/Gatearm	6U1615-X	61				
GATEARM CONVERSION BRACKET W/CAST BREAKAWAY	6R1621-X	65	076227-513X			38-0027-600
GATEARM CONVERSION BRACKET W/CAST BREAKAWAY f/Cantiliever Mounted Mech Left Hand	6R1590-XL	66				
GATEARM CONVERSION BRACKET W/CAST BREAKAWAY f/Cantiliever Mounted Mech Right Hand	6R1590-XR	66				38-0026-251-2
GATEARM CONVERSION BRACKET W/FABRICATED BREAKAWAY	6R1620-X	65	076227-22X			
GATEARM CONVERSION BRACKET W/HEXAGON CAST BREAKAWAY f/Hi Wind Gates	6R1621-5X	66				
GATEARM CORD 3D #16 SJO SWO	DA6641	61				
GATEARM CORD CLAMP INSULATED No Screw	CA1775	61				
GATEARM LAMP 4" DIA FIXED "L" BRACKET MOUNT NO BOX w/Mtg Hdw	6P1035-X	62				
GATEARM LAMP 4" DIA FIXED "L" BRACKET MOUNT NO BOX w/Mtg Hdw (Kit of 3ea 6P1035-X)	6P1035-X-P3	62				
GATEARM LAMP 4" DIA FIXED MOUNT ALUM BOX w/Mtg Hdw	6P1017-X	62				1591-4
GATEARM LAMP 4" DIA FIXED MOUNT ALUM BOX w/Mtg Hdw (Kit of 3ea 6P1017-X)	6P1017-X-P3	62				1591-50
GATEARM LAMP 4" DIA FIXED MOUNT POLY BOX w/Mtg Hdw	6P1013-X	62	075970-X			1591-4
GATEARM LAMP 4" DIA FIXED MOUNT POLY BOX w/Mtg Hdw (Kit of 3ea 6P1013-X)	6P1013-X-P3	62				1591-50
GATEARM LAMP 4" DIA STAIN STEEL STRAP MTG NO DRILLING ALUM BOX	6P1017-28X	62	075970-1X			1591-4
GATEARM LAMP 4" DIA STAIN STEEL STRAP MTG NO DRILLING ALUM BOX (Kit of 3ea 6P1017-28X)	6P1017-28X-P3	62				1591-50
GATEARM LAMP 4" DIA STAIN STEEL STRAP MTG NO DRILLING POLY BOX	6P1013-28X	62				1591-4
GATEARM LAMP 4" DIA STAIN STEEL STRAP MTG NO DRILLING POLY BOX (Kit of 3ea 6P1017-28X)	6P1013-28X-P3	62				1591-50
GATEARM LAMP 7" DIA FIXED "L" BRACKET MOUNT NO BOX w/Mtg Hdw	6P1036-X	63				
GATEARM LAMP 7" DIA FIXED "L" BRACKET MOUNT NO BOX w/Mtg Hdw (Kit of 3ea 6P1036-X)	6P1036-X-P3	63				
GATEARM LAMP 7" DIA FIXED MOUNT ALUM BOX w/Mtg Hdw	6P1024-X	63				1592-4
GATEARM LAMP 7" DIA FIXED MOUNT ALUM BOX w/Mtg Hdw (Kit of 3ea 6P1024-X)	6P1024-X-P3	63				1592-50
GATEARM LAMP 7" DIA STAIN STEEL STRAP MTG NO DRILLING ALUM BOX	6P1024-28X	63				1592-4
GATEARM LAMP 7" DIA STAIN STEEL STRAP MTG NO DRILLING ALUM BOX (Kit of 3ea 6P1024-28X)	6P1024-28X-P3	63				1592-50
GATEARM LAMP BOX ONLY CAST ALUM f/Fixed Mtg w/Grommets & Hdw	6P1004-7X	64				
GATEARM LAMP BOX ONLY CAST ALUM f/Stainless Steel Clamp Mtg w/Grommets	6P1004-10X	64				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		29				
GATEARM LAMP BOX ONLY POLY f/Fixed Mtg w/Grommets & Hdw	6P1004-7X	64				
GATEARM LAMP BOX ONLY POLY f/Stainless Steel Clamp Mtg w/Grommets	6P1004-10X	64				
GATEARM LAMP LENS KIT 4" DIA w/2ea Lenses Gasket & Screws	7B1026C-X	64				
GATEARM LAMP LENS ONLY 4" DIA No Hdw	7B1018	64	075952-500X			90837-1
GATEARM LAMP LENS ONLY 7" DIA No Hdw	7B1002	64				90847-1
GATEARM LAMP ONLY 4" DIA w/Ring Socket Lenses Mtg Hdw	6P1019-X	64				90837
GATEARM LAMP ONLY 7" DIA w/Lense Ring Socket Lenses Mtg Hdw	6P1003-X	64				
GATEARM SHEAR BOLT 5/16" x 2"LONG w/1" Thread Nuts Lockwasher f/Cast & Fab Brkwy	6R1570-X	67				38-0027-13
GATEARM SHEAR BOLT 5/16" x 2"LONG w/1-1/2" Thread Nuts Lockwasher f/Cast & Fab Brkwy	6R1570-1X	67				
GATEARM SHEAR PIN DEEP GROOVE 5/16" x 6-1/2" LONG f/USS or WCH Brkwy w/Nut & Cotter	6R1571-X	67				
GATEARM SHEAR PIN SHALLOW GROOVE 5/16" x 6-1/2" LONG f/USS or WCH Brkwy w/Nut & Cotter	6R1572-X	67				
GATEARM TAPER (PIVOT) PIN f/Conversion Bracket w/Cast Breakaway	6R1551-X	67				38-0027-62-A
GATEARM WIND GUARD ADJUSTABLE 22" WIDE f/4" Mast	6U5565-6X	68				
GATEARM WIND GUARD ADJUSTABLE 22" WIDE f/5" Mast	6U5565-2X	68				3565-120-SS
GATEARM WIND GUARD ADJUSTABLE 26" WIDE f/5" Mast	6U5565-4X	68				
GATEARM WIND GUARD EXTENSION f/10" Dia Cantilever Mast No Wind Guard	6U7162-X	69				
GATEARM WIND GUARD FIXED 14" WIDE f/4" Mast	6U5565-X	68				
GATEARM WIND GUARD FIXED 14" WIDE f/5" Mast	6U5565-1X	68				
GATEARM WIND GUARD FIXED 14" WIDE f/EM Pedestal 4" Mast	6U5570-X	68				
HOOD FLASHER f/12" 12" Long Steel	6B5224S-X	38	042005-30AX			
HOOD FLASHER f/8" 10" Long Steel	6B5026S	38	042005-X1			
LENS CLIP f/8" or 12" Flasher	6N5207	38				
LENS GASKET f/8" or 12" Flasher	6B70627	38				
MAST FLASHER 4" DIA x 13FT 1 SLOT @ 9'- 6" w/Base Slot	5L5542	52		M451394-5101		714-00-00
MAST FLASHER 4" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot	5L5543	52				714-00-00
MAST FLASHER 4" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot & 1 Slot @ 180 Deg Right from Base Slot	5L5543-180	52				
MAST FLASHER 4" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot & 1 Slot @ 270 Deg Right from Base Slot	5L5543-270	52				
MAST FLASHER 4" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot & 1 Slot @ 90 Deg Right from Base Slot	5L5543-90	52				
MAST FLASHER 5" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot	5L5544	52		M4513940-3902		715-00-00
MAST FLASHER 5" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot & 1 Slot @ 180 Deg Right from Base Slot	5L5544-180	52				
MAST FLASHER 5" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot & 1 Slot @ 270 Deg Right from Base Slot	5L5544-270	52				
MAST FLASHER 5" DIA x 15FT 1 SLOT @ 9'- 6" w/Base Slot & 1 Slot @ 90 Deg Right from Base Slot	5L5544-90	52				
MAST STUB 5" DIA X 15' w/JB Base	5L5300-1X	52				
MAST STUB 5" DIA X 6' w/JB Base	5L5300-X	52				
MAST STUB EXTENSION 10FT LONG f/Adding Wind Guard w/Pinnacle Less Wind Guard	6U5549	69				
MAST STUB EXTENSION 10FT LONG w/6U5565-1X Wind Guard & Pinnacle	6U5549-X	69				
MAST STUB EXTENSION 10FT LONG w/6U5565-6X Adjustable Wind Guard & Pinnacle	6U5549-1X	69				
PINNACLE f/4" or 5" MAST w/Set Bolt	5Z7500-X	52		J026104	P76-254	110-A-6
SIGN "# TRACK" ENGINEERING TAPE No Hdw	7A1050E#	49				3368-710-C
SIGN "# TRACK" ENGINEERING TAPE w/10" Mtg Hdw	7A1050E#10	49	035238-#X			
SIGN "# TRACK" ENGINEERING TAPE w/12" Mtg Hdw	7A1050E#12	49	035239-#X			
SIGN "# TRACK" ENGINEERING TAPE w/4" Mtg Hdw	7A1050E#4	49	035213-(#)X	X392929-001		3368-710-711-4
SIGN "# TRACK" ENGINEERING TAPE w/5" Mtg Hdw	7A1050E#5	49	035230-(#)X	X392929-002		3368-710-C-811-5
SIGN "# TRACK" ENGINEERING TAPE w/6" Mtg Hdw	7A1050E#6	49				
SIGN "# TRACK" ENGINEERING TAPE w/8" Mtg Hdw	7A1050E#8	49	035209-#X			

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		29				
SIGN "# TRACK" HI INTENSITY TAPE No Hdw	7A1050H#	49				3368-770-C
SIGN "# TRACK" HI INTENSITY TAPE w/10" Mtg Hdw	7A1050H#10	49	035238-#HX			
SIGN "# TRACK" HI INTENSITY TAPE w/12" Mtg Hdw	7A1050H#12	49	035239-#HX			
SIGN "# TRACK" HI INTENSITY TAPE w/4" Mtg Hdw	7A1050H#4	49		X392929-005		3368-770-711-4
SIGN "# TRACK" HI INTENSITY TAPE w/5" Mtg Hdw	7A1050H#5	49		X392929-006		3368-770-C-811-5
SIGN "# TRACK" HI INTENSITY TAPE w/6" Mtg Hdw	7A1050H#6	49				
SIGN "# TRACK" HI INTENSITY TAPE w/8" Mtg Hdw	7A1050H#8	49				
SIGN "RR CROSSING" DIAMOND TAPE 2 SIDED No Hdw	7A1067D-TS	46				
SIGN "RR CROSSING" DIAMOND TAPE 2 SIDED w/4"Mtg Hdw	7A1067D4-TS	46				
SIGN "RR CROSSING" DIAMOND TAPE 2 SIDED w/5"Mtg Hdw	7A1067D5-TS	46				
SIGN "RR CROSSING" ENGINEERING TAPE 2 SIDED No Hdw	7A1067E-TS	46				3380-810
SIGN "RR CROSSING" ENGINEERING TAPE 2 SIDED w/4"Mtg Hdw	7A1067E4-TS	46				3370-810-711-4
SIGN "RR CROSSING" ENGINEERING TAPE 2 SIDED w/5"Mtg Hdw	7A1067E5-TS	46				3380-810-811-5
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe No Hdw	7A1061E	45				
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/10"Mtg Hdw	7A1061E10	48	035200-19X			
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/12"Mtg Hdw	7A1061E12	48	035200-21HX			
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/4" Mtg Hdw	7A1061E4	45	035200-3X	X392931-001		3380-710-711-4
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/5"Mtg Hdw	7A1061E5	45	035200-12X	X392931-002		3380-710-811-5
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/5"Mtg Hdw 10-1/2" Extn	7A1062E5	47	035200-17X			
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/6"Mtg Hdw	7A1061E6	48				
SIGN "RR CROSSING" ENGINEERING TAPE No Backstripe w/8"Mtg Hdw	7A1061E8	48	035200-1X			
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 10"Mtg Hdw	7A1061E10-6	48				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 12"Mtg Hdw	7A1061E12-6	48				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 4"Mtg Hdw	7A1061E4-6	45				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 5"Mtg Hdw	7A1061E5-6	45				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 5"Mtg Hdw 10-1/2" Extn	7A1062E5-6	47				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 6"Mtg Hdw	7A1061E6-6	48				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe 8"Mtg Hdw	7A1061E8-6	48				
SIGN "RR CROSSING" ENGINEERING TAPE w/6" Backstripe No Hdw	7A1061E-6	45				
SIGN "RR CROSSING" HI INTENSITY TAPE 2 SIDED No Hdw	7A1067H-TS	46				3380-790
SIGN "RR CROSSING" HI INTENSITY TAPE 2 SIDED w/4"Mtg Hdw	7A1067H4-TS	46				3380-790-711-4
SIGN "RR CROSSING" HI INTENSITY TAPE 2 SIDED w/5"Mtg Hdw	7A1067H5-TS	46				3380-790-811-5
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe No Hdw	7A1061H	45				
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/10"Mtg Hdw	7A1061H10	48	035200-19HBX			
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/12"Mtg Hdw	7A1061H12	48	035200-21HBX			
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/4"Mtg Hdw	7A1061H4	45		X392931-007		
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/5"Mtg Hdw	7A1061H5	45		X392931-008		3380-770-811-5
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/5"Mtg Hdw 10-1/2" Extn	7A1062H5	47	035200-17HBX			
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/6"Mtg Hdw	7A1061H6	48				
SIGN "RR CROSSING" HI INTENSITY TAPE No Backstripe w/8"Mtg Hdw	7A1061H8	48				
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 10"Mtg Hdw	7A1061H10-6	48				
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 12"Mtg Hdw	7A1061H12-6	48				
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 4"Mtg Hdw	7A1061H4-6	45				3380-780-711-4
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 5"Mtg Hdw	7A1061H5-6	45				3380-780-811-5
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 5"Mtg Hdw 10-1/2" Extn	7A1062H5-6	47				
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 6"Mtg Hdw	7A1061H6-6	48				
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe 8"Mtg Hdw	7A1061H8-6	48				
SIGN "RR CROSSING" HI INTENSITY TAPE w/6" Backstripe No Hdw	7A1061H-6	45				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		29				
SIGN MTG HDW EXTENSION BRACKET 10-1/2" LONG w/ 5/8" x 3" Sign Mtg Bolt & Hdw	7A1042-X	50				
SIGN MTG HDW f/10" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw	7A1047-10X	51				
SIGN MTG HDW f/10" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1047-10X)	7A1047-10X-P2	51				
SIGN MTG HDW f/12" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw & 10-1/2" Extn	7A1048-12X	51				
SIGN MTG HDW f/12" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw & 10-1/2" Extn(Kit of 2ea 7A1048-12X)	7A1048-12X-P2	51				
SIGN MTG HDW f/4" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw	7A1041-X	50				
SIGN MTG HDW f/4" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1041-X)	7A1041-X-P2	50				
SIGN MTG HDW f/4" Mast w/7/16" x 3" Sign Mtg Bolt & Hdw	7A1041-X1	50				
SIGN MTG HDW f/4" Mast w/7/16" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1041-X1)	7A1041-X1-P2	50				
SIGN MTG HDW f/5" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw	7A1041-1X	50				
SIGN MTG HDW f/5" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw & 10-1/2" Extn	7A1040-9X	50				
SIGN MTG HDW f/5" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw & 10-1/2" Extn(Kit of 2ea 7A1040-9X)	7A1040-9X-P2	50				
SIGN MTG HDW f/5" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1041-1X)	7A1041-1X-P2	50				
SIGN MTG HDW f/5" Mast w/7/16" x 3" Sign Mtg Bolt & Hdw	7A1041-1X1	50				
SIGN MTG HDW f/5" Mast w/7/16" x 3" Sign Mtg Bolt & Hdw & 10-1/2" Extn	7A1040-6X	50				
SIGN MTG HDW f/5" Mast w/7/16" x 3" Sign Mtg Bolt & Hdw & 10-1/2" Extn(Kit of 2ea 7A1040-6X)	7A1040-6X-P2	50				
SIGN MTG HDW f/5" Mast w/7/16" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1041-1X1)	7A1041-1X1-P2	50				
SIGN MTG HDW f/6" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw	7A1045-6X	51				
SIGN MTG HDW f/6" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1045-6X)	7A1045-6X-P2	51				
SIGN MTG HDW f/8" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw	7A1046-8X	51				
SIGN MTG HDW f/8" Mast w/5/8" x 3" Sign Mtg Bolt & Hdw (Kit of 2ea 7A1046-8X)	7A1046-8X-P2	51				
STEP POLE f/4" Flasher Mast	5Z7405-X	52				10151
STEP POLE f/5" Flasher Mast	5Z7405-1X	52				10152
TAPE REFLECTIVE RED ENGINEERING GRADE 4" X 150' ROLL	6U1140RS	60				
TAPE REFLECTIVE RED ENGINEERING GRADE 4" X 16" STRIPE FIELD SIDE	6U1099EF	60				
TAPE REFLECTIVE RED ENGINEERING GRADE 4" X 16" STRIPE TRACK SIDE	6U1099ET	60				
TAPE REFLECTIVE RED HI INTENSITY GRADE 4" X 150' ROLL	6U1142HS	60				
TAPE REFLECTIVE RED HI INTENSITY GRADE 4" X 16" STRIPE FIELD SIDE	6U1099HF	60				
TAPE REFLECTIVE RED HI INTENSITY GRADE 4" X 16" STRIPE TRACK SIDE	6U1099HT	60				
TAPE REFLECTIVE WHITE ENGINEERING GRADE 4" X 150' ROLL	6U1141RS	60				
TAPE REFLECTIVE WHITE ENGINEERING GRADE 4" X 16" STRIPE FIELD SIDE	6U1098EF	60				
TAPE REFLECTIVE WHITE ENGINEERING GRADE 4" X 16" STRIPE TRACK SIDE	6U1098ET	60				
TAPE REFLECTIVE WHITE HI INTENSITY GRADE 4" X 150' ROLL	6U1143HS	60				
TAPE REFLECTIVE WHITE HI INTENSITY GRADE 4" X 16" STRIPE FIELD SIDE	6U1098HF	60				
TAPE REFLECTIVE WHITE HI INTENSITY GRADE 4" X 16" STRIPE TRACK SIDE	6U1098HT	60				
TURNKEY CROSSING PACKAGES		30				
U-BOLT 5" DIA w/Nut, Washer & Lock Washer	7A1043-X`	50		P73-196		
U-BOLT 5" DIA w/Nut, Washer & Lock Washer	7A1044-X	50				
X-ARM ASBLY 1 WAY f/12" Mast w/Threaded Extensions	6D6000-5XT	42				
X-ARM ASBLY 1 WAY f/4" Mast w/Threaded Extensions	6D6000-XT	42				
X-ARM ASBLY 1 WAY f/5" Mast w/Threaded Extensions	6D6000-1XT	42				960-81
X-ARM ASBLY 1 WAY f/8" Mast w/Threaded Extensions	6D6000-3XT	42				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6100-4XT	41				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6160-4XT	41				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6170-4XT	41				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6175-4XT	41				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6150-4XT	42				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION B HIGHWAY CROSSING		29				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6151-4XT	42				
X-ARM ASBLY 2 WAY f/10" Mast w/Threaded Extensions	6D6060-4XT	42				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6100-5XT	41				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6160-5XT	41				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6170-5XT	41				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6175-5XT	41				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6150-5XT	42				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6151-5XT	42				
X-ARM ASBLY 2 WAY f/12" Mast w/Threaded Extensions	6D6060-5XT	42				
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6100-XT	41				960-88
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6160-XT	41				
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6170-XT	41				
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6175-XT	41				
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6150-XT	42				
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6151-XT	42				
X-ARM ASBLY 2 WAY f/4" Mast w/Threaded Extensions	6D6060-XT	42				960-28
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6100-1XT	41				
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6160-1XT	41				960-58
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6170-1XT	41				
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6175-1XT	41				960-51
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6150-1XT	42				
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6151-1XT	42				
X-ARM ASBLY 2 WAY f/5" Mast w/Threaded Extensions	6D6060-1XT	42				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6100-3XT	41				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6160-3XT	41				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6170-3XT	41				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6175-3XT	41				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6150-3XT	42				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6151-3XT	42				
X-ARM ASBLY 2 WAY f/8" Mast w/Threaded Extensions	6D6060-3XT	42				
X-ARM JCT BOX EXTENSION COVER PLATE	6B6006	43	42041			950-A-39
X-ARM JCT BOX EXTENSION COVER PLATE GASKET	6B6004A	43	41291			
X-ARM JCT BOX ONLY w/Cover, Terminals 10" Mtg Hdw	6B6001-4X	43				
X-ARM JCT BOX ONLY w/Cover, Terminals 12" Mtg Hdw	6B6001-5X	43				
X-ARM JCT BOX ONLY w/Cover, Terminals 4" or 5" Mtg Hdw	6B6001-X	43	042003-18			950-A-62
X-ARM JCT BOX ONLY w/Cover, Terminals 6" Mtg Hdw	6B6001-2X	43				
X-ARM JCT BOX ONLY w/Cover, Terminals 8" Mtg Hdw	6B6001-3X	43				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION C HOUSES & CASES		**70**				
BATTERY RACK 2 TIER ADJ 7"-11" WIDE X 32"	2A52455	82				
BATTERY RACK 2 TIER ADJ 7"-11" WIDE X 52"	2A52456	82				
BATTERY RACK 2 TIER ADJ 7"-11" WIDE X 82"	2A52457	82				
BATTERY TRAY POLY 12" WIDE X 24" LONG	2A53309	82				
BATTERY TRAY POLY 12" WIDE X 27" LONG	2A53310	82				
BATTERY TRAY POLY 12" WIDE X 38" LONG	2A53311	82				
BATTERY TRAY WOOD 11-11/14" WIDE X 27" LONG	2A53308	82				
BATTERY TRAY WOOD 11-11/14" WIDE X 32" LONG	2A53307	82				
BATTERY TRAY WOOD 11-11/14" WIDE X 57-3/4" LONG	2A53304	82				
GROUND BOLT 14-24 1-1/2"LONG w/Hdw	9A2236-1X	83				
GROUND STUD 14-24 X 3" LOMNG w/Hdw	9A2239-X	83				
GROUND WELDED 4" LONG PIGTAIL f/House & Case Grounding	FA855C1G36	83				
HOUSE CABLE RISER 4" DIA X 24" LONG w/Bushing F/Case Use Also	2A55854-X1	85				
HOUSE CABLE RISER 4" DIA X 36" LONG w/Bushing F/Case Use Also	2A55854-2X	85				
HOUSE DOOR GASKET 1/2" THICK f/Case Door Use Also	JR70625	85				
HOUSE FLOOR MATT DIAMOND GRID 48" WIDE f/Case Use Also	JT53090-###	85				
HOUSE HEATER WALL MOUNT 1500/1125W f/3x4 to 6x6 House	2A70226	84				
HOUSE HEATER WALL MOUNT 4000/3000W f6x8 House and Up	2A70229	84				
HOUSE LAMP RECEPTACLE INCANDESCENT w/Pull Chain Less Bulb	ZL70390	85				
HOUSE THERMOSTAT ONLY 50 to 90 Degree f/Case Use Also	A51238	84				
HOUSE VENT FAN & THERMOSTAT AERIAL MOUNT 120CFM w/Mtg Bracket & Hdw f/Case Use Also	2A51235-3X	84				
HOUSE VENT FAN AERIAL MOUNT 120CFM w/Mtg Bracket & Hdw f/Case Use Also	2A51235-3	84				
HOUSE VENT FAN CEILING MOUNT 1140 CFM f/6x6 House & Up	2A70304	85				
HOUSE/CASE SHELF KITS		85				
INSTRUMENT CASE HIGH DOUBLE DOOR STANDARD LAYOUT		78				
INSTRUMENT CASE LOW SINGLE DOOR STANDARD LAYOUT		77				
INSTRUMENT CASES STANDARD FEATURES & OPTIONS		76				
INSTRUMENT HOUSE 6X6 STANDARD LAYOUT		73				
INSTRUMENT HOUSES & CASES STEEL & ALUMINUM ALL SIZES GENERAL INFORMATION		71				
INSTRUMENT HOUSES STANDARD FEATURES & OPTIONS		72				
POWER OFF LIGHT JEWEL TYPE 3" DIA CLEAR LENS f/House & Case	2A70374	83				
POWER OFF LIGHT LENS GUARD f/4" DIA LENS 2A1673-X Power Off Light	2A670	83				
POWER OFF LIGHT LENS ONLY 4" DIA CLEAR No Hdw	7B1018C	83				
POWER OFF LIGHT ONLY 4" DIA CLEAR LENS w/Ring Socket Mtg Hdw	2A1019C-5X	83				
POWER OFF LIGHT PIPE MOUNT 4" DIA CLEAR LENS w/Lens Guard f/Case	2A1673-X	83				
RACK EQUIPMENT FIXED f/House	2A570002-X	80				
RACK RELAY DOUBLE SWING f/House	2A570000-X	79				
RACK RELAY SINGLE SWING LEFT HAND f/House	2A570001-X	79				
RACK RELAY SINGLE SWING RIGHT HAND f/House	2A570001-1X	79				
RACK RELAY SUPPORT BAR 18-3/8" LONG	2A53705	81				
RACK RELAY SUPPORT BAR 19-3/4" LONG	2A53705-1	81				
RACK RELAY SUPPORT BAR 23-1/4" LONG	2A53703	81				
RACK RELAY SUPPORT BAR 35-5/8"LONG	2A53707-1	81				
RACK RELAY SUPPORT BAR 36-1/2" LONG	2A53707	81				
RACK RELAY SUPPORT BAR 47-5/8"LONG	2A53707-2	81				
RACK RELAY WIRE TIE BAR 18-1/8" LONG X 4" DEEP	2A53706	81				
RACK RELAY WIRE TIE BAR 19-7/8" LONG X 4"DEEP	2A53706-1	81				
RACK RELAY WIRE TIE BAR 19-7/8" LONG X 4-1/2" DEEP	2A53706-2	81				
RACK RELAY WIRE TIE BAR 23-3/8" LONG X 4"DEEP	2A53702	81				
RACK TWC FIXED f/House	2A570001-1X	80				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION D TERMINATION & PUSH BUTTON BOXES		**86**				
BOX TERMINATION & PUSH BUTTON GENERAL INFORMATION		87				
BOX TERMINATION PEDESTAL TYPE 7-1/2"D x 11-3/4"W x 11-3/4"L w/Up to 36 Terms 4" Ped	3A7005	88			A91-230	
BOX TERMINATION PEDESTAL TYPE 3-5/8"D x 7"w x 9-1/4"L w/Up to 24 Terms 3" Ped	3A7100	89				
BOX TERMINATION PEDESTAL TYPE 6"D x 7-1/4"W x 10-1/4"L w/Up to 24 Terms 3" Ped	3A7112	90				
BOX TERMINATION PEDESTAL TYPE 3-3/4"D x 4-5/16"W x 6-15/16"L w/Up to 6 Terms 4" Ped	3A7300	91				
BOX TERM/PB FLUSH/POLE TYPE 12-3/4"H x 8-1/2"W x 5-1/4"D w/Up to 24 Terms or 4 PB's	3A7120	92				
BOX ROUTE SELECTOR PUSH BUTTON TYPE	3A7120	92				
BOX TERM/PB FLUSH/POLE TYPE 3-7/16"D x 4-11/16"H x 5-5/8"L w/Up to 8 Terms or 2 PB's	3A8000	93				
SECTION E BATTERY ENCLOSURES		**94**				
BATTERY ENCLOSURE FIBERGLASS 21"D x 26"L x 20"W w/Lockable Lid	4A9006-X	95				
BATTERY ENCLOSURE FIBERGLASS 11-1/2"D x 13/1/2"L x 9"W w/Lockable Lid	4A9007-X	95				
BATTERY ENCLOSURE FIBERGLASS 36"D x 36"L x 36"W w/Lockable Lid	4A9003-X	95				
BATTERY ENCLOSURE EXTERNAL CASE TYPE ALUMINUM 26-1/4"H x 18"D x 36"W w/Foundations	0A283618A	96				
SECTION F SIGNAL BASES		**97**				
BASE SIGNAL JUNCTION BOX 4" 11-11/16" BOLT SPACING CAST ALUM w/12Terms	7D5800-X	98	041902-AX			2147-A-11
BASE SIGNAL JUNCTION BOX 4" 9-1/2" BOLT SPACING CAST ALUM w/12Terms	7D5700-X	98	041906-AX	J705049-0201		2146-A-11
BASE SIGNAL JUNCTION BOX 5" 11-11/16" BOLT SPACING CAST ALUM w/24Terms	7D5920-X	99	041931-2X	J705049-0801	A30-537	2149-A-111-G
BASE SIGNAL JUNCTION BOX COVER f/7D5702-X & 7D5700-X	7D5703	100				
BASE SIGNAL JUNCTION BOX COVER f/7D5802-X & 7D5800-X	7D5803	100				
BASE SIGNAL JUNCTION BOX COVER f/7D5920-X & 7D5950-X	7D5923A	100				
BASE SIGNAL JUNCTION BOX DOUBLE 5" 11-11/6" BOLT SPACING CASTALUM w/48Terms	7D5950-X	99	041931-1X			
BASE SIGNAL JUNCTION BOX HALF 11-11/6" BOLT SPACING f/7D5920-X & 7D5950-X	7D5921-X	100				
BASE SIGNAL JUNCTION BOX HALF 4" 11-11/16" BOLT SPACING f/7D5800-X & 7D5802-X	7D5802-X	100				
BASE SIGNAL JUNCTION BOX HALF 4" 9-1/2" BOLT SPACING f/7D5700-X	7D5702-X	100				
BASE SIGNAL SPLIT 4" 11-11/16" BOLT SPACING CAST ALUMINUM w/Hdw	7D5810-X	98	041905-AX			2143-A
BASE SIGNAL SPLIT 4" 9-1/2" BOLT SPACING CAST ALUMINUM w/Hdw	7D5710-X	98	041901-AX			14492-A
BASE SIGNAL SPLIT 5" 11-11/16" BOLT SPACING CAST ALUMINUM w/Hdw	7D5922-X	99			P76-340	
BASE SIGNAL SPLIT HALF 4" 11-11/16" BOLT SPACING f/7D5810-X & 7D 5800-X No Hdw	7D5801	100				
BASE SIGNAL SPLIT HALF 4" 9-1/2" BOLT SPACING f/7D5710-X & 7D5700-x No Hdw	7D5701	100				
BASE SIGNAL SPLIT HALF 5" 11-11/16" BOLT SPACING f/7D5922-X 7D5920-X	7D5922	100				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION G FOUNDATIONS		**101**				
FOUNDATION ADAPTOR PLATE GALV STEEL f/Adapting from 19" to 11-11/16" Bolt Spacing	8A20142-X	108				
FOUNDATION ADAPTOR PLATE GALV STEEL f/Adapting from 8A20140-1X to 8A20140-X	8A21144-X	108				
FOUNDATION ADAPTOR PLATE GALV STEEL f/Adapting from 9-1/2" to 11-11/16" Bolt Spacing	8A21141-1X	108				
FOUNDATION CABLE RISER GALV STEEL 18" HIGH w/Hdw	8A20130-4X	108				
FOUNDATION CANTILEVER POUR IN PLACE 72" HIGH 19" BOLT SPACING w/Rebar & Tube	8A031146-000	107				
FOUNDATION CANTILEVER POUR IN PLACE 72" HIGH 23" X 17" BOLT SPACING w/Rebar&Tube	8A031120-00	107				
FOUNDATION CASE GALV STEEL 48" HIGH 18-1/2" BOLT SPACING w/Hdw	8A20101-X	102				
FOUNDATION CASE GALV STEEL 48" HIGH 18-1/2" BOLT SPACING w/Walkway Platforms & Hdw		102				
FOUNDATION DWARF SIGNAL GALV STEEL 24" HIGH 6" 8" 10" BOLT SPACING w/Hdw	8A20133-X	104				
FOUNDATION ES20 SIGNAL GALV STEEL 24" HIGH 12-3/4" BOLT SPACING w/Hdw	8A20133-6X	104				
FOUNDATION FLASHER GALV STEEL 48" HIGH 9-1/2" & 11-11/6" BOLT SPACING w/Hdw	8A20140-1X	102	035903-911X			
FOUNDATION FLASHER/GATE STEEL 48" HIGH 9-1/2" & 11-11/16" BOLT SPACING w/36"Base Plate	8A20140-X	103	035903-9111X			
FOUNDATION GATE OR SIGNAL PYRAMID GALV STEEL 60" HIGH 11-11/16" BS w/36" Base Plate	8020157-X	103	035903-500X			
FOUNDATION HOUSE DROP DOWN ADJUSTABLE		105				
FOUNDATION HOUSE GALV STEEL 48" HIGH f/LW 3x4 Top Load Hse w/24" x 55" Base Plate & Hdw	8A20186-X	105				
FOUNDATION HOUSE GALV STEEL 48" TALL TRIANGULAR TOP w/20" x 24" Base Plate & Hdw	8A20158-X	106				
FOUNDATION HOUSE GALV STEEL 48" TALL TRIANGULAR TOP w/8" x 24" Base Plate & Hdw	8A20126-X	106				
FOUNDATION LEVELING BOLT KIT 1"-8 X 8'LONG BOLT w/Hdw	8A20017-X	108				
FOUNDATION SIGNAL CONCRETE 1 PIECE 48" TALL 9-1/2" BOLT SPACING w/dw	8AA131721-3X	107				
FOUNDATION SIGNAL CONCRETE 1 PIECE 54" TALL 11-11/16" BOLT SPACING w/dw	8AA131721-4X	107				
SECTION H WIRING MATERIALS		**109**				
CONNECTOR BUSS STRAP 1" CENTERS 12 HOLE PLATED	9A2216-12	114	023839-5			10766
CONNECTOR BUSS STRAP 1" CENTERS 24 HOLE PLATED	9A2216-24	114	023839-5			10766
CONNECTOR BUSS STRAP 1" CENTERS 3 HOLE PLATED	9A2216-3	114	023839-5			10766
CONNECTOR BUSS STRAP 1" CENTERS 36 HOLE PLATED	9A2216-36	114	023839-5			10766
CONNECTOR BUSS STRAP 1" CENTERS 4 HOLE PLATED	9A2216-4	114	023839-5			10766
CONNECTOR BUSS STRAP 1" CENTERS 6 HOLE PLATED	9A2216-6	114	023839-5			10766
CONNECTOR STRAP SLIDE 1" CENTERS	9A2215	114	023837			1056-2
CONNECTOR STRAP SLIDE 2-3/8" CENTERS	9A2217	114	023836		P3-148	1056-4
CONNECTOR STRAP SOLID 1" CENTERS	9A2200	114	023839-2			219-5
CONNECTOR STRAP SOLID 2-3/8" CENTERS	9A2201	114	023839-1			
EYELET RING TONGUE INSULATED #10-12 #5/16" STUD	9A2282	117				
EYELET RING TONGUE INSULATED #10-12 #6 STUD	9A2241	117				
EYELET RING TONGUE INSULATED #10-12 1/4" STUD	9A2243	117				
EYELET RING TONGUE INSULATED #10-12 1/4" STUD	9A2297	117				
EYELET RING TONGUE INSULATED #14-16 #6 STUD	9A2244	117				
EYELET RING TONGUE INSULATED #14-16 1/4" STUD	9A2242	117				
EYELET RING TONGUE INSULATED #22-16 #6 STUD	9A2269	117				
EYELET RING TONGUE INSULATED #22-16 1/4" STUD	9A2262	117				
EYELET RING TONGUE INSULATED# 6-8 1/4" STUD	9A2261	117				
EYELET RING TONGUE NON INSULATED #22-16 1/4" STUD	9A2248	117				
EYELET RING TONGUE NON INSULATED #22-16 1/4" STUD	9A2258	117				
EYELET RING TONGUE NON INSULATED #22-16 1/4" STUD	9A2259	117				
EYELET RING TONGUE NON INSULATED #6 1/4" STUD	9A2253	117				
GROUND BUSS BAR ONLY f/12 Terminals	FA23000-1	112				
GROUND BUSS BAR ONLY f/6 Terminals	FA23000	112				
GROUND BUSS BAR w/12 Terminals & Hdw	FA23000-1X	112				
GROUND BUSS BAR w/6 Terminals & Hdw	FA23000-X	112				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION H WIRING MATERIALS		**109**				
GROUND STUD 1-1/2" LONG 14-24 w/Hdw	9A2236-1X	113				107010-A
GROUND STUD 1-1/2" LONG 14-24 w/Hdw	9A2236-3X	113				
INSULATING SHIELD ONLY GRAY 1-1/8" LONG 1 SLOT	9A2220	122				
INSULATING SHIELD ONLY GRAY 1-1/8" LONG 1 SLOT w/Cap	9A2220-X	122	023408-6X			
INSULATING SHIELD ONLY GRAY 1-7/16" LONG 1 SLOT	9A2222	122				
INSULATING SHIELD ONLY GRAY 1-7/16" LONG 1 SLOT w/Cap	9A2222-X	122	023408-23X			
INSULATING SHIELD ONLY RED 1-1/8" LONG 1 SLOT	9A2220R	122				
INSULATING SHIELD ONLY RED 1-1/8" LONG 1 SLOT w/Cap	9A2220R-X	122				
INSULATING SHIELD ONLY RED 1-7/16" LONG 1 SLOT	9A2222R	122				
INSULATING SHIELD ONLY RED 1-7/16" LONG 1 SLOT w/Cap	9A2222R-X	122				
INSULATING CAP ONLY f/1/4" Stud	9A2221	122				R-2000-1
NUT BINDING AAR	9A2204	110	023831		P76-131	10706
NUT CLAMP AAR	9A2202	110	023832		P65-585	10707
POST BINDING 1-1/2" LONG 3/8" SQ HEAD 14-24 No Hdw	9A2236	113				10709-1
POST BINDING 1-1/2" LONG 3/8" SQ HEAD 14-24 w/Hdw	9A2236-X	113				
POST BINDING 2" LONG 3/8" SQ HEAD 14-24 No Hdw	9A2239	113				
POST BINDING 2" LONG 3/8" SQ HEAD 14-24 w/Hdw	9A2239-X	113				
RESISTOR ADJUSTABLE 1 OHM	9A1110-1	119				
RESISTOR ADJUSTABLE 2.2 OHM	9A1110-3	119				
RESISTOR ADJUSTABLE 4 OHM	9A1110-6D	119				
RESISTOR ADJUSTABLE 5.69 OHM	9A1110-7D	119				
RESISTOR ADJUSTABLE 8 OHM	9A1110-9D	119				
RESISTOR FIXED SEALED 10 OHM W/MTG BKT 2-3/8"	9A2243-10X	119				
RESISTOR FIXED SEALED 100 OHM W/MTG BKT 2-3/8"	9A2243-100X	119				
RESISTOR FIXED SEALED 2 OHM W/MTG BKT 2-3/8"	9A2243-2X	119				
RESISTOR FIXED SEALED 50 OHM W/MTG BKT 2-3/8"	9A2243-500X	119				
TAG MARKING PEN f/White Plastic Tags & White Fiber Tags	AA2070	120				
TAGS WIRING PAPER BLUE 1-1/2"L x 1" w/String	AA2700-5	121				
TAGS WIRING PAPER GREEN 1-1/2" LONG x 1" w/String	AA2700-3	121				
TAGS WIRING PAPER RED 1-1/2"L x 1" w/String	AA2700-1	121				
TAGS WIRING PAPER WHITE 1-1/2" L x 1" w/String	AA2700-4	121				
TAGS WIRING PAPER YELLOW 1-1/2" LONG x 1" w/String	AA2700-2	121				
TAGS WIRING WHITE FIBER 1-1/2"L X 7/8"W 1/2" WIRE HOLE 2EA 1/16" MTG HOLE	AA2006	121	024359-14			16222-W
TAGS WIRING WHITE FIBER 2"L X 11/16"W 3/8" WIRE HOLE 1/4"MTG HOLE	AA2032	121				
TAGS WIRING WHITE FIBER 2-7/8"L X 1/2"W 2EA 5/16" WIRE HOLE SLOTTED	AA2035	121	024359-48			
TAGS WIRING WHITE PLASTIC 1-1/2"L X 7/8"W 1/2" WIRE HOLE	AA2000-1	120				
TAGS WIRING WHITE PLASTIC 1-1/2"L X 7/8"W 1/2" WIRE HOLE 2EA 1/16" MTG HOLE	AA2006-1	120				
TAGS WIRING WHITE PLASTIC 1-1/2"L X 7/8"W 1/2" WIRE HOLE 2EA 1/16" HOLES w/1 Pen / 100 Tags	AA2006-1X	120				
TAGS WIRING WHITE PLASTIC 1-1/2"L X 7/8"W 1/2" WIRE HOLE w/1 Pen / 100 Tags	AA2000-1X	120				
TAGS WIRING WHITE PLASTIC 2"L X 11/16"W 3/8" WIRE HOLE 1/4"MTG HOLE	AA2032-1	120				
TAGS WIRING WHITE PLASTIC 2"L X 11/16"W 3/8" WIRE HOLE 1/4"MTG HOLEw/1 Pen / 100 Tags	AA2032-1X	120				
TAGS WIRING WHITE PLASTIC 2-7/8"L X 1/2"W 2EA 5/16" WIRE HOLE SLOTTED	AA2035-1	120				
TAGS WIRING WHITE PLASTIC 2-7/8"L X 1/2"W 2EA 5/16" WIRE HOLE SLOTTED w/1 Pen / 100 Tags	AA2035-1X	120				
TAGS WIRING WHITE PLASTIC 3/4" ROUND 1/4" OFFSET WIRE HOLE	AA2067	120				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION H WIRING MATERIALS		109				
TERMINAL BLOCK 1X12 w/AAR Flat Nut Only	9A2230	110				2508-69-100
TERMINAL BLOCK 1X12 w/All AAR Hdw	9A2230-X	110	023390-11X		A3-129	2508-112
TERMINAL BLOCK 1X3 w/AAR Flat Nut Only	9A2230-3	110				
TERMINAL BLOCK 1X3 w/All AAR Hdw	9A2230-3X	110				
TERMINAL BLOCK 1X6 w/AAR Flat Nut Only	9A2230-6	110	023390-11-6X			
TERMINAL BLOCK 1X6 w/All AAR Hdw	9A2230-6X	110				
TERMINAL BLOCK 2 POST 2-3/8" w/AAR Flat Nut Only	9A2233	110				1056-310
TERMINAL BLOCK 2 POST 2-3/8" w/All AAR Hdw	9A2233-X	110	023612-1X			1056-305
TERMINAL BLOCK 2X6 w/AAR Flat Nut Only	9A2231	110				2507-12
TERMINAL BLOCK 2X6 w/All AAR Hdw	9A2231-X	110				2507-106
TERMINAL FLAG FOR STYLE B #10-14	9A2249	118				
TERMINAL FLAG FOR STYLE B #16-20	9A2250	118				
TERMINAL FLAG TONGUE #10-12	9A322316	118				
TERMINAL FLAG TONGUE #10-12 1/4" STUD	9A35345	118				
TERMINAL FLAG TONGUE #16-14	9A322310	118				
TEST EYELET f/No 10-12 Wire 1/4" Terminal	9A2207	112	024628-4X			
TEST EYELET WITH GOLD NUT f/No 10-12 Wire 1/4" Terminal	9A2207-X	112	024628-2X			
TEST LINK OFFSET 1" w/Gold Nut	9A2205-11X	111	024620-11X			
TEST LINK OFFSET 1" w/Gold Nut & Clamp	9A2205-7X	111	024620-7X			
TEST LINK OFFSET 2-3/8" w/Gold Nut & Clamp Nut	9A2211-8X	111	024620-8X			
TEST LINK STRAIGHT 1" w/Gold Nut	9A2205-X	111	024620-2X		P3-325	
TEST LINK STRAIGHT 1" w/Gold Nut & Clamp Nut	9A2205-1X	111	024620-1X			39-0024-3
TEST LINK STRAIGHT 2-3/8" w/Gold Nut	9A2211-X	111	024620-5X		P3-324	
TEST LINK STRAIGHT 2-3/8" w/Gold Nut & Clamp Nut	9A2211-1X	111	024620-4X			
TEST NUT GOLD	9A2208	111				
TEST TERMINAL f/Double Series Circuit Switch	9A2210-1X	112				
TEST TERMINAL f/Single Series Circuit Switch	9A2210-X	112				
WASHER BINDING AAR	9A2203	110	023834			10708
WASHER CLAMP AAR	9A2209	110			P76-108	
WIRE CASE BLUE PVC #10 AWG 19 STRANDS	DA6409	115				
WIRE CASE BLUE PVC #12 AWG 19 STRANDS	DA6430	115				
WIRE CASE BLUE PVC #14 AWG 19 STRANDS	DA6410	115				
WIRE CASE BLUE PVC #16 AWG 19 STRANDS	DA6408	115				
WIRE CASE NYLON BRAID #10 AWG 37 STRANDS	DA6403	115				
WIRE CASE NYLON BRAID #14 AWG 19 STRANDS	DA6400	115				
WIRE CASE NYLON BRAID #16 AWG 19 STRANDS	DA6406	115				
WIRE CASE TEFZEL #10 AWG 37 STRANDS TINNED	DA6449	115				
WIRE CASE TEFZEL #12 AWG 19 STRANDS TINNED	DA6449-12	115				
WIRE CASE TEFZEL #16 AWG 19 STRANDS TINNED	DA6448	115				
WIRE CASE TWISTED PAIR #10 AWG 19 STRANDS RED & BLACK	DA6455	116				
WIRE CASE TWISTED PAIR #14 AWG 19 STRANDS BLACK & WHITE	DA6452	116				
WIRE CASE TWISTED PAIR #14 AWG 19 STRANDS RED & BLACK	DA6450	116				
WIRE GROUND #6 SOLID COPPER SOFT DRAWN BARE	DA6422	116				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION I WIRE & CABLE		**123**				
CABLE 5C #10 COLOR CODED f/Wiring Signal Heads	DA6644	128				
CABLE 7C #12 COLOR CODED f/Wiring Signal Heads	DA6665	128				
CABLE COMPOSITE UNDERGROUND w/2C #6 8C #9 7C #14 f/Xing Installation	DA6658	128				
CABLE COMPOSITE UNDERGROUND w/3C #2-7X FMPF-L RED TW W/GND 1X6-7X f/Power	DA6663	128				
CABLE UNDERGROUND DIRECT BURIAL 12C #14	DA6654	124				
CABLE UNDERGROUND DIRECT BURIAL 3C #6	DA6650	124				
CABLE UNDERGROUND DIRECT BURIAL 5C #14	DA6653	124				
CABLE UNDERGROUND DIRECT BURIAL 5C #6	DA6651	124				
CABLE UNDERGROUND DIRECT BURIAL 5C #9	DA6662	124				
CABLE UNDERGROUND DIRECT BURIAL 7C #12	DA6665	124				
CABLE UNDERGROUND DIRECT BURIAL 7C #14	DA6652	124				
CABLE UNDERGROUND DIRECT BURIAL 7C #9	DA6656	124				
CABLE UNDERGROUND DIRECT BURIAL 9C #14	DA6657	124				
CABLE UNDERGROUND DIRECT BURIAL 7C #6	DA6655	124				
WIRE 2C #16 SJO f/Gate Lamps	DA6640	128				
WIRE 3C #16 SJO f/Gate Lamps	DA6641	128				
WIRE 4C #16 SJO f/Gate Lamps	DA6642	128				
WIRE BONDSTRAND #6 133 STRANDS TINNED BLACK PVC 1000FT SPOOL	DA6625	127	021624-2			336
WIRE BONDSTRAND #6 133 STRANDS TINNED BLACK PVC 100FT COIL	DA6625-1	127				
WIRE BONDSTRAND #6 133 STRANDS TINNED BLACK PVC 500FT COIL	DA6625-5	127				
WIRE BONDSTRAND #6 133 STRANDS TINNED BLACK RUBBER NEOPRENE 1000FT SPOOL	DA6629	127	021378-24X			
WIRE BONDSTRAND #6 133 STRANDS TINNED BLACK RUBBER NEOPRENE 100FT COIL	DA6629-1	127				
WIRE BONDSTRAND #6 133 STRANDS TINNED BLACK RUBBER NEOPRENE 500FT SPOOL	DA6629-5	127				
WIRE BONDSTRAND #6 133 STRANDS TINNED NON INSULATED 100FT COIL	DA6628-1	127	021624-1			
WIRE BONDSTRAND #6 133 STRANDS TINNED RED PVC 1000FT SPOOL	DA6622	127	021624-R			
WIRE BONDSTRAND #6 133 STRANDS TINNED RED PVC 100FT COIL	DA6622-1	127				
WIRE CASE BLUE PVC #10 AWG 19 STRANDS	DA6409	125				
WIRE CASE BLUE PVC #12 AWG 19 STRANDS	DA6430	125				
WIRE CASE BLUE PVC #14 AWG 19 STRANDS	DA6410	125				
WIRE CASE BLUE PVC #16 AWG 19 STRANDS	DA6408	125				
WIRE CASE NYLON BRAID #10 AWG 37 STRANDS	DA6403	125				
WIRE CASE NYLON BRAID #14 AWG 19 STRANDS	DA6400	125				
WIRE CASE NYLON BRAID #16 AWG 19 STRANDS	DA6406	125				
WIRE CASE TEFZEL #10 AWG 37 STRANDS TINNED	DA6449	125				
WIRE CASE TEFZEL #12 AWG 19 STRANDS TINNED	DA6449-12	125				
WIRE CASE TEFZEL #16 AWG 19 STRANDS TINNED	DA6448	125				
WIRE CASE TWISTED PAIR #10 AWG 19 STRANDS RED & BLACK	DA6455	126				
WIRE CASE TWISTED PAIR #14 AWG 19 STRANDS BLACK & WHITE	DA6452	126				
WIRE CASE TWISTED PAIR #14 AWG 19 STRANDS RED & BLACK	DA6450	126				
WIRE GROUND #6 SOLID COPPER SOFT DRAWN BARE	DA6422	128				
WIRE TRACK RUBBER NEOPRENE 2C #6 SOLID RED & BLACK TWISTED	DA6613	127				
WIRE TRACK RUBBER NEOPRENE 2C #9 SOLID RED & BLACK TWISTED	DA6611	127				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION J ELECTRONIC EQUIPMENT & RELAYS		**129**				
AC/DC POWER PACK CX1 f/Highway Crossing General Information		130				
AC/DC RECTIFIER RING 10 f/LW ED2600-X AC/DC Power Pack & Other Models Style C Power Packs	EA2610	131				
AC/DC POWER PACK RELAY POWER TRANSFER f/LW ED2600-X AC/DC Power Pack	EB2617	131				
AC/DC POWER PACK CX1 f/Highway Crossing	ED2600-X	131				
RELAYS NEW & REBUILT		132				
SECTION K LENSES BULBS LENS PROTECTORS		**133**				
LENS CLS INNER DOUBLET GLASS 5-1/2" DIA 1/2" FOCUS GREEN	7B4556GG	134				
LENS CLS INNER DOUBLET GLASS 5-1/2" DIA 1/2" FOCUS LUNAR	7B4556GL	134				
LENS CLS INNER DOUBLET GLASS 5-1/2" DIA 1/2" FOCUS RED	7B4556GR	134				
LENS CLS INNER DOUBLET GLASS 5-1/2" DIA 1/2" FOCUS YELLOW	7B4556GY	134				
LENS CLS INNER DOUBLET PLASTIC 5-1/2" DIA 1/2" FOCUS GREEN	7B4556PG	134				
LENS CLS INNER DOUBLET PLASTIC 5-1/2" DIA 1/2" FOCUS LUNAR	7B4556PL	134				
LENS CLS INNER DOUBLET PLASTIC 5-1/2" DIA 1/2" FOCUS RED	7B4556PR	134				
LENS CLS INNER DOUBLET PLASTIC 5-1/2" DIA 1/2" FOCUS YELLOW	7B4556PY	134				
LENS CLS OUTER DOUBLET LEXAN 8-3/8" DIA 5" FOCUS NO DEFLECTING BULLSEYE CLEAR	7B6450-C-L	134				
LENS CLS OUTER DOUBLET LEXAN 8-3/8" DIA 5" FOCUS W/30 DEG DEFLECTING BULLSEYE CLEAR	7B6450-30-C-L	134				
LENS CLS OUTER DOUBLET LEXAN 8-3/8" DIA 5" FOCUS W/40 DEG DEFLECTING BULLSEYE CLEAR	7B6450-40-C-L	134				
LENS CLS OUTER DOUBLET PLASTIC 8-3/8" DIA 4" FOCUS NO DEFLECTING BULLSEYE CLEAR	7B4554C	134				
LENS CLS OUTER DOUBLET PLASTIC 8-3/8" DIA 4" FOCUS NO DEFLECTING BULLSEYE CLEAR	7C4554GC	134				
LENS CLS OUTER DOUBLET PLASTIC 8-3/8" DIA 4" FOCUS W/40 DEG DEFLECTING BULLSEYE CLR	7B4554-40C	134				
LENS CLS OUTER DOUBLET PLASTIC 8-3/8" DIA 5" FOCUS NO DEFLECTING BULLSEYE CLEAR	7B6450C	134				
LENS CLS OUTER DOUBLET PLASTIC 8-3/8" DIA 5" FOCUS W/40 DEG DEFLECTING BULLSEYE CLR	7B4592GC	134				
LENS DWF OUTER DOUBLET PLASTIC 6-3/8" DIA 3-1/4" FOCUS CLEAR	7B6560C	134				
LENS DWF OUTER DOUBLET PLASTIC 6-3/8" DIA 3-3/4" FOCUS W/30 DEG SPREADLIGHT	7B7180-30-C1	134				
LENS FLASHER PLASTIC 12" DIA 32 DEG DEFLECTION 20 DEG SPREAD RED	7B5293	137	040405-4730			
LENS FLASHER PLASTIC 12" DIA 70 DEG SPREAD	7B5294	137	040405-5030			
LENS FLASHER PLASTIC 8-3/8" DIA 15 DEG DEFLECTION 30 DEG SPREAD GREEN	7B5092-G	137				
LENS FLASHER PLASTIC 8-3/8" DIA 15 DEG DEFLECTION 30 DEG SPREAD RED	7B5094	137	040405-4530			
LENS FLASHER PLASTIC 8-3/8" DIA 15 DEG DEFLECTION 30 DEG SPREAD YELLOW	7B5092-Y	137				
LENS FLASHER PLASTIC 8-3/8" DIA 20 DEG SPREAD RED	7B5091	137				
LENS FLASHER PLASTIC 8-3/8" DIA 32 DEG DEFLECTION 20 DEG SPREAD RED	7B5093	137	040405-2530			
LENS FLASHER PLASTIC 8-3/8" DIA 70 DEG SPREAD	7B5092	137	040405-5130			
LENS FLASHER PLASTIC12" DIA 15 DEG DEFLECTION 30 DEG SPREAD RED	7B5292	137	040405-5230			
LENS GATE LAMP PLASTIC 4" DIA BLUE	7B1018B	136				
LENS GATE LAMP PLASTIC 4" DIA CLEAR	7B1018C	136				
LENS GATE LAMP PLASTIC 4" DIA CLEAR KIT OF 2EA w/Gasket & Screws	7B1026C-X	136				
LENS GATE LAMP PLASTIC 4" DIA RED	7B1018	136				90837-1
LENS GATE LAMP PLASTIC 4" DIA RED KIT OF 2EA	7B1018-2	136				
LENS GATE LAMP PLASTIC 4" DIA RED KIT OF 2EA w/Gasket & Screws	7B1026R-X	136				
LENS GATE LAMP PLASTIC 7" DIA RED	7B1002	136				90847-1
LENS PROTECTOR PLASTIC 8-3/8" DIA 1/8" THICK FLAT	7B-73-8-S	136				
LENS SEARCHLIGHT OUTER GLASS PLANO CONVEX 11-1/2" FOCUS	7C7311S	135				
LENS SEARCHLIGHT OUTER LEXAN 8-3/8" DIA CLEAR 40 DEG BULLSEYE	7B7150-40-C-L	135				
LENS SEARCHLIGHT OUTER LEXAN 8-3/8" DIA CLEAR FLAT 10 DEG DEFL PLAIN CENTER	7B6680-CL	135				
LENS SEARCHLIGHT OUTER LEXAN 8-3/8" DIA CLEAR FLAT PLAIN 1/8" THICK PROTECTOR	7B73-8-L	135				
LENS SEARCHLIGHT OUTER LEXAN 8-3/8" DIA CLEAR OPTICAL 5" FOCUS	7B7150-CL	135				
LENS SEARCHLIGHT OUTER PLASTIC 8-3/8" DIA CLEAR CONVEX COVER LENS 20 DEG DEFL	7B6795-C	135				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION K LENSES BULBS LENSE PROTECTORS		**133**				
BULB SIGNAL 10V 13W/3.5W DUAL FILAMENT SINGLE CONTACT BAYONET BASE	ZA5008-6	138		J71656		
BULB SIGNAL 10V 18 W SINGLE FILAMENT SINGLE BAYONET BASE	ZA5008	138	042365	J071463		
BULB SIGNAL 10V 18 W SINGLE FILAMENT SINGLE BAYONET BASE GEMS	ZA5008-11	138				
BULB SIGNAL 10V 18W/3.5W DUAL FILAMENT SINGLE CONTACT BAYONE BASE	ZA5008-2	138	042365-11	J714166		
BULB SIGNAL 10V 25 W SINGLE FILAMENT SINGLE CONTACT BAYONET BASE	ZA5008-1	138	042365-3	J071574		
BULB SIGNAL 10V 25 W SINGLE FILAMENT SINGLE CONTACT BAYONET BASE GEMS	ZA5008-3	138				
BULB SIGNAL 10V 25 W SINGLE FILAMENT SINGLE CONTACT BAYONET BASE HALOGEN	ZA5008-15	138				
LENS PROTECTOR LEXAN 10" DIA f/GRS D & SAFETRAN CLS10 Colorlight Signal	7B80-2-P	141				
LENS PROTECTOR LEXAN 10" DIA f/US&S & LW Colorlight Signals	7B77-1-P	141				
LENS PROTECTOR STEEL MESH f/GRS SA-1& US&S Searchlight Signal Slanted Front	5S1782	140				
LENS PROTECTOR STEEL MESH f/GRS SA-1& US&S Searchlight Signal Straight Front	5S1781	140				
LENS PROTECTOR STEEL MESH f/GRS Type D Colorlight Signal	5S1784	139				
LENS PROTECTOR STEEL MESH f/LW Type 4500 & 8000 Colorlight Signal	5S1801	139				
LENS PROTECTOR STEEL MESH f/Safetran CLS10 Colorlight Signal	5S1783	139				
LENS PROTECTOR STEEL MESH f/Safetran CLS20 Colorlight Signal	5S1701	139				
LENS PROTECTOR STEEL MESH f/US&S TYPE N2 Colorlight Dwarf Signal	5S1780	140				
MIRROR FLASHER 12" GLASS DEEP DISH	6B6206	141				
MIRROR FLASHER 12" GLASS SHALLOW DISH	6B5206	141				
MIRROR FLASHER 12" PLASTIC SHALLOW DISH	6B6207	141				
MIRROR FLASHER 8" GLASS	6B5006	141				
SECTION L TRACK CONNECTION MATERIALS		**142**				
BOND PLUG 1 COPPER 6 GALV STEEL ##Specify Length	CAPAJA##	147				
BOND PLUG 3 COPPER 16 GALV STEEL ##Specify Length	CAPAJB##	147				
BOND PLUG 7-40% COPPERWELD #10 ##Specify Length	CAPAJC##	147				
BOND PLUG 7-40% COPPERWELD #12 ##Specify Length	CAPAJD##	147				
BOND PLUG FIELD MADE - BARE BONDSTRAND	DA6628	147	021624-1			
BOND PLUG FIELD MADE COPPER SLEEVE 1"L	CA12C	147				
BOND PLUG FIELD MADE COPPER SLEEVE 3/4"L	CA11C	147				
BOND PLUG FIELD MAKE WELD METAL CARTRIDGE	CA25	147				
BOND PLUG TRACK CONNECTOR 3/16" X #6 STRAND 4" LONG (Chicken Head)	CA1700	147				335
BOND WELD JOINT HEAD XS 6-1/2" LONG W/CA25 POWDER	CA24882	148				
BOND WELD JOINT HEAD XS 9-3/4" LONG W/CA25 POWDER	CA24884	148				
BOND WELD JUMPER 3/4 XS W/CA25 POWDER ##Specify Length	AXSJ33##	148				
BOND WELD SWITCH 3/4 XS W/CA25 POWDER ##Specify Length	CAXSS33##	148				
BOOTLEG CAST ALUM BOX w/Pedestal 2ea Cable Entrances	CA1721-X	149				
BOOTLEG CAST ALUM BOX w/Pedestal 4ea Cable Entrances	CA1721-19X	149				
BOOTLEG PROTECTIVE PLATE STEEL 6"W x 24"L x 1/4"T (Lagged Screwed Between Ties)	CA22000-1	149				
BOOTLEG PVC PIPE 3" DIA x 18"LONG w/Slots for Side Wire Entrance	CA1727-X	149				
BOOTLEG RUBBER HOSE REINFORCED 1-3/8" DIA x 18" LONG w/1Side Wire Entrance	CA1755	149				
CABLE PROTECTIVE PLATE STEEL 6"W x 24"L x 1/4"T MARKED "CABLE"	CA22000	149				
GROUND ROD COPPER COATED 3/4"DIA x 10FT LONG	FA70425	152				
GROUND ROD COPPER COATED 3/4"DIA x 8FT LONG	FA70424	152				
GROUND ROD COPPER COATED 5/8"DIA x 10FT LONG	FA70400-1	152				
GROUND ROD COPPER COATED 5/8"DIA x 8FT LONG	FA70400	152				
GROUND WELDED TYPE GR 1 WIRE #6 & 8 SOLID f/ 3/4" Dia Ground Rod	FAGR1181G	152				
GROUND WELDED TYPE GR 1 WIRE #6 & 8 SOLID f/ 5/8" Dia Ground Rod	FAGR1161G	152				
GROUND WELDED TYPE GT 2 WIRE #6 & 8 SOLID f/ 3/4" Dia Ground Rod	FAGT1181G	152				
GROUND WELDED TYPE GT 2 WIRE #6 & 8 SOLID f/ 5/8" Dia Ground Rod	FAGT1161G	152				
GROUND WELDED TYPE NT 3 WIRE #6 & 8 SOLID f/ 3/4" Dia Ground Rod	FANT1181G	152				
GROUND WELDED TYPE NT 3 WIRE #6 & 8 SOLID f/ 5/8" Dia Ground Rod	FANT1161G	152				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION L TRACK CONNECTION MATERIALS		**142**				
SHUNT HOUSING GALV STEEL 8"W x 8"L x 30"H w/Lockable Lid	CA2905-X	150				
SHUNT HOUSING PVC TUBE 8"DIA x 40"H w/Cap & Protective Plate	CA1643-3X	150				
SLEEVE BONDSTRAND REDUCING 3/16"(Bondstrand) to #6 Solid or #8 Stranded AWG	BA2363J	143				337-2
SLEEVE BONDSTRAND REDUCING 3/16"(Bondstrand) to #8 Solid Copper or #9 Stranded AWG	BA2364J	143				337-1
SLEEVE BONDSTRAND REDUCING 3/16"(Bondstrand) to #9 or #10 AWG Solid Copper	BA2314J	143				337
SLEEVE BONDSTRAND SPLICING 3/16" (Bondstrand) to 3/16" (Bondstrand)	BA2367J	143				337-3
SLEEVE OFFSET DEADEND FOR OLID COPPER or COPPER COVERED STEEL #8 AWG J Groove	BA91-128J	144				
SLEEVE OFFSET DEADEND FOR SOLID COPPER or COPPER COVERED STEEL #10 AWG J Groove	BA91-102J	144				
SLEEVE OFFSET DEADEND FOR SOLID COPPER or COPPER COVERED STEEL #6 AWG J Groove	BA91-162J	144				
SLEEVE OFFSET DEADEND FOR SOLID COPPER or COPPER COVERED STEEL #8 AWG J Groove	BA91-114J	144				
SLEEVE REDUCING FOR OLID COPPER #6 to #9 AWG J Groove	BA1-162X114J	145				
SLEEVE REDUCING FOR OLID COPPER #8 to # 10 AWG J Groove	BA1-162X128J	145				
SLEEVE REDUCING FOR SOLID COPPER #6 to #12 AWG J Groove	BA1-162X102J	145				
SLEEVE REDUCING FOR SOLID COPPER #6 to #9 AWG J Groove	BA1-128X114J	145				
SLEEVE REDUCING FOR SOLID COPPER #8 to #10 AWG J Groove	BA1-128X102J	145				
SLEEVE REDUCING FOR SOLID COPPER #9 to #10 AWG J Groove	BA1-114X102J	145				
SLEEVE SPLICING FOR SOLID COPPER #10 to #10 AWG D Groove	BA1-102D	144				
SLEEVE SPLICING FOR SOLID COPPER #10 to #10 AWG J Groove	BA1-102J	144				
SLEEVE SPLICING FOR SOLID COPPER #12 to #12 AWG D Groove	BA1-080D	144				
SLEEVE SPLICING FOR SOLID COPPER #14 to #14 AWG C Groove	BA1-064C	144				
SLEEVE SPLICING FOR SOLID COPPER #6 to #6 AWG J Groove	BA1-162J	145				
SLEEVE SPLICING FOR SOLID COPPER #6 to #6 AWG TINNED J Groove	BA1-162JT	145				
SLEEVE SPLICING FOR SOLID COPPER #8 to #8 AWG E Groove	BA1-128E	144				
SLEEVE SPLICING FOR SOLID COPPER #8 to #8 AWG J Groove	BA1-128J	144				
SLEEVE SPLICING FOR SOLID COPPER #8 to #8 AWG J Groove	BA1-128J	144				
SLEEVE SPLICING FOR SOLID COPPER #8 to #8 M Groove	BA1-128M	144				
SLEEVE SPLICING FOR SOLID COPPER #9 to #9 AWG J Groove	BA1-1-114J	144				
SLEEVE SPLICING FOR SOLID COPPER #9 to #9 AWG TINNED D Groove	BA1-1-114DT	145				
SLEEVE SPLICING FOR SOLID COPPER #9 to #9 D Groove	BA1-114D	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #10 to #10 AWG D Groove	BA3-102D	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #10 to #10 AWG J Groove	BA1-102J	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #14 to #14 AWG B Groove	BA3-064B	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #14 to #14 AWG C Groove	BA1-064C	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #14 to #14 AWG D Groove	BA1-064D	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #6 to #6 AWG P Groove	BA1-162P	145				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #8 to #8 AWG J Groove	BA3-128J	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #8 to #8 AWG M Groove	BA1-128M	144				
SLEEVE SPLICING FOR SOLID COPPER COVERED STEEL #9 to #9 AWG J Groove	BA1-114J	144				
SLEEVE SPLICING FOR SOLID COPPER#12 to #12 AWG C Groove	BA1-080C	144				
TERMINAL LUG 3/16" (Bondstrand) to 1/4" Terminal Post	BA2412J	143				337-5
TUBING COLD SHRINK BLACK 7"L x .039 TO .70 Dia 1000v	CA1754-2	151				
TUBING HEAT SHRINK BLACK 12"L x .750 Dia	CA1749	151				
TUBING HEAT SHRINK BLACK 12"L x 1" Dia	CA70666	151				
TUBING HEAT SHRINK BLACK 12"L x 1-1/2" Dia	CA70667	151				
TUBING HEAT SHRINK BLACK 48"L x 1/2" Dia	CA70664	151				
TUBING HEAT SHRINK BLACK 48"L x 1/4" Dia	CA70662	151				
TUBING HEAT SHRINK BLACK 48"L x 1/8" Dia	CA70660	151				
TUBING HEAT SHRINK BLACK 48"L x 3/4" Dia	CA70665	151				
TUBING HEAT SHRINK BLACK 48"L x 3/8" Dia	CA70663	151				
TUBING HEAT SHRINK BLACK 6"L x .8 Dia	CA1760	151				
TUBING PROTECTIVE 1/2" DIA FIBERGLASS REINFORCED VINYL TUBE (Protects Wire from Ballast)	CA1751	150				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION L TRACK CONNECTION MATERIALS		**142**				
WELDERS RAIL T-6 f/ 6-1/2" XS Style Bond	CAXST6A	148				
WELDERS RAIL T-7 f/ 9-3/4" XS Style Bond	CAXST7D	148				
WIRE CLAMP METAL INSULATED LOOP 1SPIRAL NAIL f/ 3/8" Wire (Bondstrand)	CA1775-X	146				
WIRE CLAMP POLY 2 SPIRAL NAILS f/3/8" Wire (Bondstrand)	CA1777-X	146				
WIRE RETAINING CLIP DOUBLE PARALLEL f/ 3/8" Dia Wire	CA251	146				
WIRE RETAINING CLIP PARALLEL f/ 5/16" Dia Wire	CA2380	146				
WIRE RETAINING CLIP PERPENDICULAR f/ 3/8" Dia Wire	CA248B	146				
WIRE RETAINING CLIP PERPENDICULAR f/ 5/16" Dia Wire	CA2370	146				
WIRE STAPLE DIAMOND POINT 1-1/2"L x 3/8"W x .144T	CA1763	146				
WIRE STAPLE DIAMOND POINT 1-1/2"L x 5/16"W x .144T	CA1762	146				
WIRE STAPLE DIAMOND POINT 2"L x 1/2"W x .162T	CA1764	146				
WIRE STAPLE DIAMOND POINT 2"L x 1-1/16"W x .162T	CA1765	146				
WIRE STAPLE DIAMOND POINT 3"L x 1"W x .250T	CA1766	146				
SECTION M POLELINE HARDWARE		**153**				
POLE SEAT GALVANIZED STEEL	FA16550-X	154				
POLELINE INSULATOR HI IMPACT POLY 4" H 1" PIN HOLE 1-5/8" GROOVE	FA1800	154				
POLELINE TIE WIRE #10 AWG 30% HARD COPPER 2/164" INSULATION 26" LONG f/Poleline	FA6460	154				
POLELINE MATERIALS - ALL TYPES		155				
SECTION N SWITCH LAYOUTS & COMPONENTS		**156**				
ADJUSTABLE LINK 16" TO 20"	HL996874-000	170				
ADJUSTING NUT CASTING 1 1/4" - 7 THREAD	HL001185-001	181				
ADJUSTING NUT CASTING 1 1/4" - 7 THREAD	HL001165-003	181				
ADJUSTMENT BASKET BODY HORIZONTAL	HL001184-001	181				
ADJUSTMENT BASKET BODY VERTICAL	HL001140-001	181				
ADJUSTMENT BASKET BODY VERTICAL	HL001187-001	181			P91-313	
BAR TRANSIT SWIVEL LEFT HAND WITH 2 1/2" DROP	HL001156-101	178				
BAR TRANSIT SWIVEL LEFT HAND WITH 4 3/8" DROP	HL001156-102	178				
BAR TRANSIT SWIVEL RIGHT HAND WITH 2 1/2" DROP	HL001155-101	178				
BAR TRANSIT SWIVEL RIGHT HAND WITH 4 3/8" DROP	HL001155-102	178				
BUSHING INSULATOR F/3/4"BOLT 1-7/32"L F/1" TRANSIT BAR	HL024109-000	180				
CARRIER PIPE STRAP ONE WAY f/1" Pipe	HL4000-X	169				
COMPENSATOR STRGHT ARM DIM X=11 3/4" Y=11 3/4"	HL996951-000	169				
COMPENSATOR STRGHT ARM DIM X=9" Y=9"	HL996950-000	169				
CONNECTOR PIN (THREADED) 7/8" X 2 1/2" LONG	HL996015-000	183			P91-120	
CONNECTOR PIN (THREADED) 7/8" X 2 3/4" LONG	HL996015-001	183				
CONNECTOR PIN 7/8" X 2 1/2" LONG	HL996124-001	183				
CONNECTOR PIN 7/8" X 2 1/4" LONG	HL996124-000	183			P91-100	
COUPLER OFFSET 3 1/2" F/ MTG THROW ROD TO GRS SW MACH	HL001194-001	171			P85-925	
COUPLER SHIM 1" F/GRS SWH MACH	HL071849-001	171				
COUPLER SHIM 1" F/U.S.&S. SW MACH	HL071848-001	171				
COUPLER STRGHT F/ MTG THROW ROD TO GRS SW MACH MOD 6	HL001211-001	171				
COUPLER STRGHT F/MTG THROW ROD TO GRS SW MACH	HL001112-001	171				
COUPLER STRHT F/MTG THROW ROD TO US&S SW MACH	HL001143-001	171				
CRANK RIGHT ANGLE 11 3/4" X 11 3/4"	HL996962-000	169				
CRANK RIGHT ANGLE 9" X 9"	HL996963-000	169				
CRANK STAND WITH PIN	HL996966-000	169				
EXTENSION PLATE F/GRS SW MACH 8" X 24"	HL051124-000	173				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION N SWITCH LAYOUTS & COMPONENTS						
GAUGE PLATE 119# INSL #1 POINT LENGTH 16' 6"	HLGP119-1-16-6	175				
GAUGE PLATE 119# INSL #1 POINT LENGTH 24'	HLGP119-1-24	175				
GAUGE PLATE 119# INSL #1 POINT LENGTH 30'	HLGP119-1-30	175				
GAUGE PLATE 119# INSL #1 POINT LENGTH 39'	HLGP119-1-39	175				
GAUGE PLATE 119# INSL #2 POINT LENGTH 16' 6"	HLGP119-2-16-6	175				
GAUGE PLATE 119# INSL #2 POINT LENGTH 24'	HLGP119-2-24	175				
GAUGE PLATE 119# INSL #2 POINT LENGTH 30'	HLGP119-2-30	175				
GAUGE PLATE 119# INSL #2 POINT LENGTH 39'	HLGP119-2-39	175				
GAUGE PLATE 119# INSULATED #01	HLGP119-01	175				
GAUGE PLATE 136# INSL #01	HLGP136-01	175				
GAUGE PLATE 136# INSL #1 POINT LENGTH 24'	HLGP136-1-24	175				
GAUGE PLATE 136# INSL #1 POINT LENGTH 30'	HLGP136-1-30	175				
GAUGE PLATE 136# INSL #1 POINT LENGTH 39'	HLGP136-1-39	175				
GAUGE PLATE 136# INSL #2 POINT LENGTH 24'	HLGP136-2-24	175				
GAUGE PLATE 136# INSL #2 POINT LENGTH 30'	HLGP136-2-30	175				
GAUGE PLATE 136# INSL #2 POINT LENGTH 39'	HLGP136-2-39	175				
GAUGE PLATE 136# INSL #2, POINT LENGTH 16' 6"	HLGP136-2-16-6	175				
GAUGE PLATE 136# INSL#1 POINT LENGTH 16' 6"	HLGP136-1-16-6	175				
GAUGE PLATE BOLT EXTENSION ASBLY	HLGP-30A	175				
GAUGE PLATE POWER EXTENSION	HLGPE-1	175				
GRIP NUT 3/4" - 10	HL051905-000	182				
GRIP NUT 7/8" - 9	HL031024-002	182				
HELPER ASBLY F/ RH OR LH 39' TURNOUT	HLSPHA39R(L)	169				
HELPER ASBLY F/RH OR LH 30' TURNOUT	HLSPHA30R(L)	169				
INSL KIT 1 1/4" TRANSIT BAR OR GAUGE ROD	HL031098-000	180				
INSL KIT 1" TRANSIT BAR OR GAUGE ROD	HL031098-001	180				
INSL KIT 3/4" TRANSIT BAR OR GAUGE ROD	HL031098-002	180				
INSL KIT FOR CONTROLLER ROD	HL031188-000	179			A91-220	
INSL KIT HORZ ADJ BASKET 1 1/4" TRANSIT BAR	HL031080-002	180				
INSL KIT HORZ ADJ BASKET 1" TRANSIT BAR	HL031080-001	180				
INSL KIT VERT ADJ BASKET 1 1/4" X 2 1/2" TRANSIT BAR	HL031088-002	179				
INSL KIT VERT ADJ BASKET 1" X 2 1/2" TRANSIT BAR	HL031088-001	179				
INSL KIT VERT ADJ BASKET 3/4" X 2 1/2" TRANSIT BAR	HL031088-000	179				
INSL KIT VERT ADJ BASKET OR CTR LUG 1 1/4" TRANSIT BAR	HL031189-002	179				
INSL KIT VERT ADJ BASKET OR CTR LUG 1" TRANSIT BAR	HL031189-001	179				
INSL KIT VERT ADJ BASKET OR CTR LUG 3/4" TRANSIT BAR	HL031189-000	179				
INSL KIT,HORZ ADJ BASKET 3/4" TRANSIT BAR	HL031080-000	180				
INSULATOR BUSHING FOR 3/4" BOLT, 1 15/32" LONG FOR 1 1/4" TRANSIT BAR	HL024109-001	180				
INSULATOR BUSHING FOR 3/4" BOLT, 31/32" LONG FOR 3/4" TRANSIT BAR	HL024109-002	180				
LATCH STAND F/GRS SW MACH		176				
LATCH STAND PLATE F/GRS SW MACH		176				
LETTER "N" SWITCH LEVER	HLSF-08	183				
LETTER "R" SWITCH LEVER	HLSF-09	183				
LEVER LATCH STAND UNIVERSAL	HLSF-01	183				
LOCK ROD CONNECTING F/FRONT SWIVEL ROD	HL061178-00	166				
LOCK ROD OFFSET 1 1/4" X 61"L W/ 4" OFFSET	HL996801-002	166				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION N SWITCH LAYOUTS & COMPONENTS						
LUG CENTER NO OFFSET	HL001159-101	179				
LUG CENTER NO OFFSET	HL001176-001	179				
LUG CENTER WITH OFFSET	HL001159-102	179				
LUG DROP F/DETECTOR ROD DIM X=2 1/2" DIM Y=25/32"	HL031101-000	168				
LUG DROP F/DETECTOR ROD DIM X=2 1/2" DIM Y=25/32"	HL031101-004	168				
LUG DROP F/DETECTOR ROD DIM X=4 1/2" DIM Y=25/32"	HL031101-005	168				
LUG DROP F/DETECTOR ROD DIM X=4" DIM Y=25/32"	HL031101-006	168				
LUG DROP F/LOCK ROD DIM X=2 1/2" DIM Y=1 1/32"	HL031101-003	168				
LUG DROP F/LOCK ROD DIM X=3 1/2" DIM Y=1 1/32"	HL031101-001	168				
LUG DROP F/LOCK ROD DIM X=4 1/4" DIM Y=1 5/16"	HL031101-007	168				
LUG DROP F/LOCK ROD DIM X=5" DIM Y=1 1/32"	HL031101-002	168				
LUG POINT W/2"WIDE TPRD SHNK DIM X=15 3/4" Y=8 7/8"	HL996014-000	167			A91-207	
LUG POINT W/ 2"WIDE TPRD SHNK DIM X=21 1/2" Y=13 5/8"	HL996014-007	167			A91-463	
LUG POINT W/ 2"WIDE TPRD SHNK 19 7/8" LONG	HL996169-004	168				
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=15 3/4" Y=8 7/8"	HL996179-000	167			A91-200	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=17 1/8" Y=10 1/4"	HL996179-004	167			A91-450	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=18 1/2" Y=11 5/8"	HL996179-001	167			A91-201	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=19 7/8" Y=13"	HL996179-005	167			A91-451	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=21 1/2" Y=13 5/8"	HL996179-007	167			A91-453	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=21 1/4" Y=14 5/8"	HL996179-002	167			A91-202	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=22 3/4" Y=15 7/8"	HL996179-006	167			A91-452	
LUG POINT W/2 1/2"WIDE TPRD SHNK DIM X=24 1/4" Y=17 5/8"	HL996179-003	167			A91-203	
LUG POINT W/2"WIDE TPRD SHNK DIM X=17 1/8" Y=10 1/4"	HL996014-004	167			A91-460	
LUG POINT W/2"WIDE TPRD SHNK DIM X=18 1/2" Y=11 5/8"	HL996014-001	167			A91-208	
LUG POINT W/2"WIDE TPRD SHNK DIM X=19 7/8" Y=13"	HL996014-005	167			A91-461	
LUG POINT W/2"WIDE TPRD SHNK DIM X=21 1/4" Y=14 3/4"	HL996014-002	167			A91-209	
LUG POINT W/2"WIDE TPRD SHNK DIM X=22 3/4" Y=15 7/8"	HL996014-006	167			A91-462	
LUG POINT W/2"WIDE TPRD SHNK DIM X=24 1/4" Y=17 3/8"	HL996014-003	167			A91-210	
LUG POINT W/2"WIDE TPRD SHNK 15 3/4" LONG	HL996169-003	168				
LUG POINT W/2"WIDE TPRD SHNK 17 7/8" LONG	HL996169-000	168		UN434215		
LUG SWIVEL ASBLY LH 13 1/8"L W/5 3/16" DROP	HL991192-021	177				
LUG SWIVEL ASBLY LH 13 1/8"L W/4 1/4" DROP	HL991192-011	177				
LUG SWIVEL ASBLY LH 15 1/8"L W/4 1/4" DROP	HL991192-121	177				
LUG SWIVEL ASBLY LH 15 1/8"L W/5 3/16" DROP	HL991192-111	177				
LUG SWIVEL ASBLY RH 13 1/8"L W/4 1/4" DROP	HL991102-021	177				
LUG SWIVEL ASBLY RH 15 1/8"L W/5 3/16" DROP	HL991102-111	177				
LUG SWIVEL LUG ASBLY RH 15 1/8"L W/4 1/4" DROP	HL991102-121	177				
LUG SWIVEL WITH BALL END DIM Y=3 1/2"	HL001154-001	177				
LUG SWIVEL WITH BALL END DIM Y=4 1/2"	HL001154-002	177				
LUG SWIVEL WITH BALL END DIM Y=6 1/2"	HL001154-003	177				
LUG SWIVEL WITHOUT BALL END DIM Y=4 1/2"	HL001152-001	177				
LUG SWIVEL WITHOUT BALL END DIM Y=3 1/2"	HL001152-000	177				
LUG SWIVEL WITHOUT BALL END DIM Y=6 1/2"	HL001152-002	177				
NUT CUPPED HEAVY HEX 1 1/4" - 7	HL071126-000	182		UM182552	P91-122	
NUT HEAVY HEX 1 1/4" - 7	HL	182				
NUT HEAVY HEX 1" - 8	HL	182				
NUT HEAVY HEX 3/4" - 10	KD96223	182				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION N SWITCH LAYOUTS & COMPONENTS						
NUT HEAVY HEX JAM 1 1/4" - 7 X 11/16" THICK	KD96131	182				
NUT HEAVY HEX JAM 1" - 8 X 9/16" THICK	KD96129	182				
NUT HEAVY SQUARE 1" - 8	KD96225	182				
NUT HEAVY SQUARE 3/4" - 10	KD96222	182				
NUT SLOTTED HEAVY HEX 1" - 8		182				
NUT SLOTTED HEAVY HEX 3/4" - 10		182				
PLATE CONNECTOR 1/2" STL 2 1/2" BOLT CTRS F/3/4" BOLT	HL061141-000	180			P91-312	
PLATE EXTENSION F/DAPPED TIE NO OFFSET	HL996802-000	173				
PLATE EXTENSION F/NON DAPPED TIE W/ 2" OFFSET 30"L	HL996803	173				
POINT LUG BOLT KIT 1" 8" X 4 1/2"	HL8820-1X	174				
POINT LUG BOLT KIT 1" 8" X 4"	HL8820-X	174				
POINT LUG BOLT KIT 1" 8" X 5 1/2"	HL8821-1X	174				
POINT LUG BOLT KIT 1" 8" X 5"	HL8821-X	174				
POINT LUG BOLT KIT 1" 8" X 6 1/2"	HL8822-1X	174				
POINT LUG BOLT KIT 1" 8" X 6"	HL8822-X	174				
POINT LUG BOLT KIT 3/4" 10" X 4"	HL8810-X	174				
POINT LUG BOLT KIT 3/4" 10" X 5 1/2	HL8811-1X	174				
POINT LUG BOLT KIT 3/4" 10" X 6 1/2"	HL8812-1X	174				
POINT LUG BOLT KIT 3/4" 10" X 6"	HL8812-X	174				
POINT LUG BOLT KIT 3/4" 10" X 5"	HL8811-X	174				
POINT ROLLER SET	HLJMF-PR1	168				
RETAINING BASKET KIT	HL071922-000	181				
ROD POINT DETECTOR FAR RAIL 1"DIA DIM X=7' 2 1/2"	HL996159-003	162			A91-173	
ROD FRONT SWIVEL W/4 1/4"DROP ON CENTER A=15 1/8" B=8 1/2"TO10"	HL996977-005	158				
ROD FRONT SWIVEL W/4 1/4"DROP ON CENTER A=13 1/8" B=6 1/2"TO8"	HL996977-001	158				
ROD FRONT SWIVEL W/4 1/4"DROP ON CENTER LUG A=15 1/8" B=12 1/2"TO14"	HL996979-005	161				
ROD FRONT SWIVEL W/5 5/16"DROP ON CENTER A=13 1/8" B=6 1/2"TO8"	HL996977-003	158				
ROD FRONT SWIVEL W/5 5/16"DROP ON CENTER A=15 1/8" B=8 1/2"TO10"	HL996977-007	158				
ROD FRONT SWVL MF STYLE W/FORGED CT LUG	HL996224-000	160				
ROD FRONT SWVL MF STYLE W/OFFSET CTR LUG ANGLE	HL996223-000	160				
ROD FRONT SWVL W/2 1/2" DROP ON CTR LUG	HL996809-100	160				
ROD FRONT SWVL W/4 1/4"DROP ON CTR A=13 1/8" B=3 1/2"TO5"	HL996976-001	159			A91-430	
ROD FRONT SWVL W/4 1/4"DROP ON CTR A=15 1/8" B=5 1/2"TO7"	HL996976-005	159				
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=13 1/8" B=1/2"TO2"	HL996970-001	158				
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=13 1/8" B=10 1/2"TO12"	HL996979-001	161				
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=13 1/8" B=3 1/2"TO5"	HL996971-001	161				
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=13 1/8" B=7 1/2"TO9"	HL996978-001	159			A91-390	
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=15 1/8" B=2 1/2"TO4"	HL996970-005	158				
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=15 1/8" B=5 1/2"TO7"	HL996971-005	161				
ROD FRONT SWVL W/4 1/4"DROP ON CTR LUG A=15 1/8" B=9 1/2"TO11"	HL996978-005	159				
ROD FRONT SWVL W/4 3/8" DROP ON CTR LUG	HL996809-000	160				
ROD FRONT SWVL W/5 5/16"DROP ON CTR A=13 1/8" B=3 1/2"TO5"	HL996976-003	159			A91-431	
ROD FRONT SWVL W/5 5/16"DROP ON CTR A=15 1/8" B=5 1/2"TO7"	HL996976-007	159				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=13 1/8" B=1/2"TO2"	HL996970-003	158				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=13 1/8" B=10 1/2"TO12"	HL996979-003	161				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=13 1/8" B=3 1/2"TO5"	HL996971-003	161				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=13 1/8" B=7 1/2"TO9"	HL996978-003	159			A91-391	

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION N SWITCH LAYOUTS & COMPONENTS						
OD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=15 1/8" B=12 1/2"TO14"	HL996979-007	161				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=15 1/8" B=2 1/2"TO4"	HL996970-007	158				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=15 1/8" B=5 1/2"TO7"	HL996971-007	161				
ROD FRONT SWVL W/5 5/16"DROP ON CTR LUG A=15 1/8" B=9 1/2"TO11"	HL996978-007	159				
ROD HELPER 1" X 20" GALVANIZED STEEL	HL996019-000	169				
ROD LOCK STRAIGHT 1 1/4" X 60" LONG	HL996148-000	166				
ROD LOCK STRIAGHT 1 1/4" X 96" LONG	HL996148-004	166				
ROD LOCK OFFSET 1 1/4" X 58 1/4"L W/ 3" OFFSET	HL996801-000	166				
ROD LOCK OFFSET 1 1/4" X 65 1/2"L W/ 4" OFFSET	HL996801-001	166				
ROD LOCK STRAIGHT 1 1/4" X 64 1/2" LONG	HL996800-000	166				
ROD LOCK STRAIGHT 1 1/4" X 68" LONG	HL996148-005	166				
ROD LOCK STRAIGHT 1 1/4" X 70" LONG	HL996148-001	166				
ROD LOCK STRAIGHT 1 1/4" X 72" LONG	HL996148-002	166				
ROD LOCK STRAIGHT 1 1/4" X 74" LONG	HL996148-104	166				
ROD LOCK STRAIGHT 1 1/4" X 76" LONG	HL996148-003	166				
ROD OPERATING ASBLY VERT INSL W/ MTG BOLTS	HL996861-000	174				
ROD OPERATING ASBLY VERT INSL W/TWSTD END MTG BOLTS	HL996861-100	174				
ROD POINT DETECTOR 47"L 2-1/4" OFFSET NEAR RAIL	HL996138-000	163				
ROD POINT DETECTOR FAR RAIL 1"DIA DIM X=6' 4"	HL996159-000	162			A91-170	
ROD POINT DETECTOR FAR RAIL 1"DIA DIM X=6' 8 1/2"	HL996159-001	162			A91-171	
ROD POINT DETECTOR FAR RAIL 1"DIA DIM X=7' 10"	HL996159-006	162			A91-176	
ROD POINT DETECTOR FAR RAIL 1"DIA DIM X=7' 8 1/2"	HL996159-005	162			A91-05	
ROD POINT DETECTOR FAR RAIL 1"DIA DIM X=8' 9"	HL996159-007	162				
ROD POINT DETECTOR NEAR RAIL 1" DIA DIM X=3'	HL996013-000	162				
ROD POINT DETECTOR NEAR RAIL 1" DIA DIM X=3' 11"	HL996013-002	162				
ROD POINT DETECTOR NEAR RAIL 1" DIA DIM X=3' 8"	HL996013-001	162				
ROD POINT DETECTOR NEAR RAIL 1" DIA DIM X=6' 1"	HL996013-003	162				
ROD POINT DETECTOR NEAR RAIL 1" DIA DIM X=6' 7"	HL996013-004	162				
ROD POINT DETECTOR NEAR RAIL W/SWVL END 1"DIA 49"L	HL996894-000	163				
ROD POINT DETECTOR ROD FAR RAIL 1"DIA DIM X=7'	HL996159-002	162			A91-173	
ROD SOLID JAW 1 1/4" TANGED END F/1" PIPE	HL996091-000	169				
ROD SW CIRCUIT CNTRLR NEAR RAIL 1"DIA DIM X=2' 10"	HL996125-000	163			A91-190	
ROD SW CIRCUIT CNTRLR FAR RAIL 1"DIA DIM X=7' 2"	HL996158-001	163			A91-182	
ROD SW CIRCUIT CNTRLR FAR RAIL 1"DIA DIM X=7' 6"	HL996158-000	163			A91-181	
ROD SW CIRCUIT CNTRLR FAR RAIL 1"DIA DIM X=9' 6"	HL996158-002	163				
ROD SW CIRCUIT CNTRLR ROD NEAR RAIL 1"DIA DIM X=3' 10"	HL996125-003	163				
ROD SW CIRCUIT CNTRLR ROD NEAR RAIL 1"DIA DIM X=3' 4"	HL996125-001	163			A91-191	
ROD SW CIRCUIT CNTRLR ROD NEAR RAIL 1"DIA DIM X=3' 6"	HL996125-002	163			A91-192	
ROD SW CIRCUIT CNTRLR ROD NEAR RAIL 1"DIA DIM X=4' 10"	HL996125-004	163				
ROD SWITCH ASBLY HORZ INSUL & ADJ	HL996230-000	175				
ROD SWITCH ASBLY HORZ NON-INSUL & ADJ	HL996230-100	175				
ROD THROW OFFSET 1 1/4" X 71"L W/ 1" OFFSET	HL996145-005	165				
ROD THROW OFFSET 1 1/4" X 72"L W/ 2 1/8" OFFSET	HL996145-002	165				
ROD THROW OFFSET 1 1/4" X 72"L W/ 2 3/4" OFFSET	HL996145-004	165				
ROD THROW OFFSET 1 1/4" X 72"L W/ 3 1/2" OFFSET	HL996145-006	165				
ROD THROW OFFSET 1 1/4" X 74"L W/ 1 7/8" OFFSET	HL996145-007	165				
ROD THROW OFFSET 1 1/4" X 82"L W/ 1 7/8" OFFSET	HL996145-001	165				
ROD THROW OFFSET 1 1/4" X 98"L W/1 7/8" OFFSET	HL996145-000	165				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION N SWITCH LAYOUTS & COMPONENTS						
ROD THROW STRAIGHT 1 1/4" X 108" LONG	HL996152-002	164				
ROD THROW STRAIGHT 1 1/4" X 144" LONG	HL996152-004	164				
ROD THROW STRAIGHT 1 1/4" X 42" LONG	HL996152-000	164				
ROD THROW STRAIGHT 1 1/4" X 65" LONG	HL996156-000	164				
ROD THROW STRAIGHT 1 1/4" X 68" LONG	HL996156-006	164				
ROD THROW STRAIGHT 1 1/4" X 70" LONG	HL996156-007	164				
ROD THROW STRAIGHT 1 1/4" X 72" LONG	HL996152-001	164				
ROD THROW STRAIGHT 1 1/4" X 74" LONG	HL996156-004	164				
ROD THROW STRAIGHT 1 1/4" X 78" LONG	HL996156-003	164				
ROD THROW STRAIGHT 1 1/4" X 81" LONG	HL996156-002	164				
ROD THROW STRAIGHT 1 1/4" X 84" LONG	HL996156-005	164				
SCREW JAW 1 1/4" - 7 THREAD	HL001196-001	183				
SCREW JAW KIT 1" - 8 THREAD	HL031141-000	183			A91-215	
SCREW JAW ROD TANGED END F/1" PIPE	HL996008-000	169				
SIGN SPRING SWITCH MARKER DOUBLE FACED BLACK ON WHITE	7A1200	184				
SPRING TAPER SHANK	HL105118-000	181			P91-143	
SWITCH ADJ BASKET HORZ F/1 1/4" BAR	HL996123-002	173				
SWITCH ADJ BASKET HORZ F/1" BAR	HL996123-001	173				
SWITCH ADJ BASKET HORZ F/3/4" BAR	HL996123-000	173				
SWITCH ADJ BASKET VERT F/1 1/4" BAR	HL996122-002	172				
SWITCH ADJ BASKET VERT F/1 1/4" BAR	HL996989-002	172				
SWITCH ADJ BASKET VERT F/1" BAR	HL996122-001	172				
SWITCH ADJ BASKET VERT F/1" BAR	HL996989-001	172				
SWITCH ADJ BASKET VERT F/3/4" BAR	HL996122-000	172				
SWITCH ADJ BASKET VERT F/3/4" BAR	HL996989-000	172				
SWITCH ADJ BASKET VERT W/CMPRSN SPRINGS F/1" BAR	HL996221-001	172				
SWITCH ADJ BASKET VERT W/CMPRSN SPRINGS F/3/4" BAR	HL996221-000	172				
SWITCH ADJ BASKET VERTI W/CMPRSI SPRINGS F/1 1/4" BAR	HL996221-002	172				
TIE BOLT KIT 3/4" DIAMETER 3" THREAD 11" LONG	HL031133-000	171				
TIE BOLT KIT 3/4" DIAMETER 3" THREAD 12" LONG	HL031133-004	171				
TIE BOLT KIT 3/4" DIAMETER 3" THREAD 13" LONG	HL031133-003	171				
TIE BOLT KIT 3/4" DIAMETER 3" THREAD 16" LONG	HL031133-001	171				
TIE BOLT KIT 3/4" DIAMETER 3" THREAD 17" LONG	HL031133-002	171				
TIE BOLT KIT 7/8" DIAMETER 3" THREAD 11" LONG	HL031024-000	171				
TIE BOLT KIT 7/8" DIAMETER 3" THREAD 12" LONG	HL031024-004	171				
TIE BOLT KIT 7/8" DIAMETER 3" THREAD 13" LONG	HL031024-003	171				
TIE BOLT KIT 7/8" DIAMETER 3" THREAD 16" LONG	HL031024-001	171				
TIE BOLT KIT 7/8" DIAMETER 3" THREAD 17" LONG	HL031024-002	171				
TIE STRAP 1 1/4" OFFSET 20"CTRLINE OF HOLES	HL091189-000	170				
TIE STRAP 2 1/2" OFFSET 19 1/2"&17 1/2" CTRLINE OF HOLES	HL061194-000	170				
TIE STRAP 3/4" OFFSET 20" CENTERLINE OF HOLES	HL061189-001	170				
TIE STRAP 7" DROP 19 1/2" 17"&5" CTRLINE OF HOLES	HL061223-000	170				
TIE STRAP 7" DROP 20" CTRLINE OF HOLES	HL061222-000	170				
TIE STRAP STRAIGHT 19 1/2" 17"& 5" CTRLINE OF HOLES	HL061224-000	170				
TIE STRAP STRAIGHT 20" CENTERLINE OF HOLES	HL061192-000	170				
TIE STRAP STRAIGHT 22" CENTERLINE OF HOLES	HL061192-001	170				
TIE STRAP STRAIGHT 22", 22"&20" CTRLINE OF HOLES	HL061180-000	170				
TIE STRAP STRGHT 20" 20" 22" 21"&20 1/2" CTRLINE OF HOLES	HL061225-000	170				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION N SWITCH LAYOUTS & COMPONENTS						
TRANSIT BAR CONNECTING	HL071768-000	178				
TRANSIT BAR F/SWIVEL FRONT ROD 1"THICK X 36" LONG	HL071883-000	178			P91-273	
WASHER PLATE 1/4" THICK STL 5" BOLT CTRS F/1" BOLTS	HL051147-000	178		UM118863		
WASHER PLATE 1/4" THICK STL 5" BOLT CTRS F/3/4" BOLTS	HL051148-000	178				
WASHER PLATE 1/8" THICK STL 5" BOLT CTRS F/3/4" BOLTS	HL061144-000	178				
WASHER RETAINING 2 7/16"IDX3 1/4"OD 5/64" THICK	HL108197-000	181				
WASHER STRGHT SHANK STL 2"ODX.890"IDX 1/4" THICK	HL071094-001	181				
WASHER STRGHT SHANK, STL 2" ODX1"IDX1/4" THICK	HL071094-000	181				
WASHER, TAPER SHANK, FOR SPRING	HL071814-000	181				
SECTION O SWITCH MACHINES & COMPONENTS						
ARM OPERATING COMPLETE F/U5 SW CIRCUIT CNTRLR	HGU44	211				
ARM OPERATING ONLY F/U5 SW Circuit Controller	HGU44A	211				
ARMATURE MAGNET f/DA-10 Air SW Mach	HGDA-27	205		M001707		
BALL STUD 3/4"-10 STUD F/U5 SW CIRCUIT CNTRLR	HGU8A	210				
BALL STUD 5/8"-11 STUD F/U5 SW CIRCUIT CNTRLR	HGU8	210				
BAR LOCKING F/M23-A&M23-B SW MACH	HGSM-15	190				
BAR LUG BOLT 7/8"-9X3" HEX HD F/M23-A&M23-B SW MACH	HGSM-30	190				
BAR OPERATION F/M23-A&M23-B SW MACH	HGSM-18	190				
BAR OPERATION LUG F/M23-A&M23-B SW MACH	HGSM-19	190				
BAR POINT DETECTOR F/M23-A&M23-B SW MACH	HGSM-125	191				
BEARING CUP F/M23-A&M23-B GEAR BOX	HGG17	198				
BEARING LEVER SHAFT F/M23-A&M23-B GEAR BOX	HGG54	199				
BEARING TOP F/M23-A&M23-B GEAR BOX	HGG3	198				
BULZI TARGET INDICATOR	HGSF-50	200				
BUSHING f/DA-10 Air SW Mach	HGDA-37	205		M001091		
BUSHING ECCENTRIC F/M23-A&M23-B GEAR BOX	HGG45-B	199				
BUSHING f/ Indication Circuit Controller	HGC-6	203				
BUSHING F/M23-A&M23-B GEAR BOX	HGG34-B	198				
BUSHING F/M23-A&M23-B GEAR BOX	HGG39-B	198				
BUSHING F/M23-A&M23-B GEAR BOX	HGG81-B	199				
BUSHING F/M23-A&M23-B GEAR BOX	HGG82-B	199				
BUSHING F/M23-A&M23-B GEAR BOX	HGG83-B	199				
BUSHING F/M23-A&M23-B GEAR BOX	HGG84-B	199				
BUSHING F/M23-A&M23-B GEAR BOX	HGG85-B	199				
BUSHING F/M23-A&M23-B GEAR BOX	HGG86-B	199				
BUSHING F/M23-A&M23-B SW MACH	HGSM-79-B	191				
BUSHING F/M23-A&M23-B SW MACH	HGSM-83-B					
BUSHING F/U5 SWI CIRCUIT CNTRLR	HGU82	211				
BUSHING F/USE W/SQ HD PIN f/ Indication Circuit Controller	HGC-7	203				
BUSHING OILITE F/M23-A&M23-B GEAR BOX	HGG58-B	199				
BUSHING OPERATING LEVER f/ Indication Circuit Controller	HGC-13	203				
BUSHING POINT DETECTOR F/M23-A&M23-B SW MACH	HGSM-66	191				
CABLE ENT COUPLER 90 DEG w/ 1 1/2" NPT Threaded Hole	HG996253-002	214				
CABLE ENT COUPLER 90 DEG w/ 1 1/4" NPT Threaded Hole	HG996253-001	214				
CABLE ENTRANCE COUPLER STRAIGHT w/ 1 1/2" NPT Threaded Hole	HG996870-002	214				
CABLE ENTRANCE COUPLER STRAIGHT w/ 1 1/4" NPT Threaded Hole	HG996870-001	214				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION O SWITCH MACHINES & COMPONENTS						
CAM BOLT SS ADJ SCREW F/U5 SW CIRCUIT CNTRLR	HGU35	210				
CAM COMPLETE 2 POS F/U5 SW CIRCUIT CNTRLR	HGU29	210				
CAM FOLLOWER LINK F/M23-A&M23-B GEAR BOX	HGG49	199				
CAM INDICATION f/ Indication Circuit Controller	HGC-53	203				
CAM ONLY 2 POS F/U5 SW CIRCUIT CNTRLR	HGU32	210				
CAM SHAFT F/4-WAY 2 POS F/U5 SW CIRCUIT CNTRLR	HGU28	210				
CAM SHAFT F/4-WAY 3 POS) F/U5 SW CIRCUIT CNTRLR	HGU28B	210				
CAM SHAFT F/4-WAY COMBO 2&3) F/U5 SW CIRCUIT CNTRLR	HGU28A	210				
CAM SHAFT F/6-WAY 2 POS F/U5 SW CIRCUIT CNTRLR	HGU28C	210				
CAM SHAFT F/6-WAY 3 POS/COMBO) F/U5 SW CIRCUIT CNTRLR	HGU28D	210				
CAM SLIDE BAR F/M23-A&M23-B SW MACH	HGSM-16	190				
CAP MAGNET f/DA-10 Air SW Mach	HGDA-25	205		M323630		
CASE 4-WAY 2 POS 2 & 3 POS F/U5 SWH CIRCUIT CNTRLR	HGU81	211				
CASE 4-WAY 3 POS F/U5 SW CIRCUIT CNTRLR	HGU81A	211				
CIRCUIT CNTRLR WIRE HARNESS F/M23-A&M23-B SW MACH	HGSM-140-A	191				
CLAMP F/U5 SW CIRCUIT CNTRLR	HGU16	210				
CLAMP RETURN SPRING F/U5 SW CIRCUIT CNTRLR	HGU98	211				
CLUCH UPPER SPRING F/M23-A&M23-B GEAR BOX	HGG77	199				
CLUTCH 10SPLINE MAIN CRK HNDOPR F/M23-A&M23-B GEAR BOX	HGG75	199				
CLUTCH 10SPLINE MAIN CRK MTROPR F/M23-A&M23-B GEAR BOX	HGG76A	199				
CLUTCH 5SPLINE MAIN CRK HNDOPR F/M23-A&M23-B GEAR BOX	HGG75A	199				
CLUTCH FRICTION ADJ NUT F/M23-A&M23-B GEAR BOX	HGG11	198				
CLUTCH FRICTION DISC F/M23-A&M23-B GEAR BOX	HGG9	198				
CLUTCH FRICTION END PLATE F/M23-A&M23-B GEAR BOX	HGG6	198				
CLUTCH FRICTION SPRING F/M23-A&M23-B GEAR BOX	HGG10	198				
CLUTCH GEAR F/M23-A&M23-B GEAR BOX	HGG18	198				
CLUTCH HOUSING FRICTION F/M23-A&M23-B GEAR BOX	HGG5	198				
CLUTCH LOWER CUP F/M23-A&M23-B GEAR BOX	HGG79	199				
CLUTCH SELCTR 10SPLINE MAIN CRK F/M23-A&M23-B GEAR BOX	HGG40A-10	199				
CLUTCH SELCTR 5SPLINE MAIN CRK F/M23-A&M23-B GEAR BOX	HGG40-5	199				
CLUTCH SELCTR YOKE F/M23-A&M23-B GEAR BOX	HGG41	199				
CLUTCH SELECTOR CUP F/M23-A&M23-B GEAR BOX	HGG78	199				
CONDUIT ASBLY 1-1/2" GREENFIELD CONDUIT f/U5 Controller	HG1740-10X	209				
CONDUIT LIQ TGHT OTLT F/M23-A&M23-B SW MACH	HGSM-23A	190				
CONDUIT LIQUID TIGHT FITTING F/M23A & M23B SW MACHINE		201				
CONDUIT OUTLET F/M23-A&M23-B SW MACH	HGSM-23	190				
CONNECTOR SWITCH BOX JUMPER 1-3/8" CENTERS	9A2206	213				
CONTACT HEEL F/U5 SW CIRCUIT CNTRLR	HGU55	211				
CONTACT NORMAL F/U5 SW CIRCUIT CNTRLR	HGU57	211				
CONTACT REVERSE F/U5 SW CIRCUIT CNTRLR	HGU56	211				
CONTACT SEGMENT f/ Indication Circuit ControllerLR	HGC-51	203				
CONTACT SUPPORT REFORCD SPRING F/U5 SW CIRCUIT CNTRLR	HGU60	211				
COTTER 3/16" X 2" STEEL T.P.C. f/DA-10 Air SW Mach	HGDA-06	204		J048636		
COVER CIRCUIT CNTRLR F/M23-A&M23-B SW MACH	HGSM-36	190				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION O SWITCH MACHINES & COMPONENTS						
COVER COMPLETE 4-WAY F/U5 SW CIRCUIT CNTRLR	HGU85	211				
COVER CRANK CASE F/M23-A&M23-B SW MACH	HGSM-39	190				
COVER f/A5 SW MACH	HG996660-000	206				
COVER GEAR BOX F/M23-A&M23-B GEAR BOX	HGG57	199				
COVER LOCK ROD F/M23-A&M23-B SW MACH	HGSM-49	191				
COVER LOCK ROD SCRAPER F/M23-A&M23-B SW MACH	HGSM-51	191				
COVER LONG CLSD LCK ROD FIELD F/M23-A&M23-B SW MACH	HGSM-88	191				
COVER LONG CLSD LCK ROD TRACK F/M23-A&M23-B SW MACH	HGSM-88A	191				
COVER MOTOR F/M23-A&M23-B SW MACH	HGSM-40	191				
COVER ONLY 4-WAY) F/U5 SWH CIRCUIT CNTRLR	HGU86	211				
COVER OPERATING BAR F/M23-A&M23-B SW MACH	HGSM-37	190				
COVER OPERATING BAR F/M23-A&M23-B SW MACH	HGSM-38	190				
COVER POINT DETECTOR BAR F/M23-A& M23-B SW MACH	HGSM-55	191				
COVER POINT DETECTOR BAR F/M23-A&M23-B SW MACH	HGSM-54	191				
COVER SLIDE BAR F/M23-A&M23-B SW MACH	HGSM-35	190				
CRANK 2-13/32"OFFSET 5/8"D HOLE F/U5 SW CIRCUIT CNTRLR	HGU5A	210				
CRANK 3/4"OFFSET 13/16"D HOLE F/U5 SW CIRCUIT CNTRLR	HGU4	210				
CRANK 3/4"OFFSET 5/8"D HOLE F/U5 SW CIRCUIT CNTRLR	HGU4A	210				
CRANK LEFT HAND f/ Indication Circuit Controller	HGC-8	203				
CRANK MAIN 10 SPLINE F/M23-A&M23-B GEAR BOX	HGG23A	198				
CRANK MAIN 5 SPLINE F/M23-A&M23-B GEAR BOX	HGG23	198				
CRANK OPER 2-13/32" OFFSET INS BALL STUD F/U5 SW CIRCUIT CNTRLR	HGU3	210				
CRANK OPER 2-13/32" OFFSET NON-INS BALL STUD F/U5 SW CIRCUIT CNTRLR	HGU3A	210				
CRANK OPER 3/4"OFFSET INS BALL STUD F/U5 SW CIRCUIT CNTRLR	HGU2	210				
CRANK OPER 3/4"OFFSET NON-INS BALL STUD F/U5 SW CIRCUIT CNTRLR	HGU2A	210				
CRANK OPER CRANK F/U5 SW CIRCUIT CNTRLR	HGU96	211				
CRANK RIGHT HAND f/ Indication Circuit Controller	HGC-11	203				
CYLINDER f/DA-10 Air SW Mach	HGDA-43	205		M371969		
DA-10 AIR SWITCH MACHINE DRAWING & REFERENCE NUMBERS		204				
DOWEL F/M23-A&M23-B GEAR BOX	HGG33	198				
EYE SCREW f/DA-10 Air SW Mach	HGDA-48	205		N371979		
EYE SCREW STRAIGHT f/DA-10 Air SW Mach	HGDA-53	205		M371980		
FITTING 1/8" PT STRAIGHT LUB f/DA-10 Air SW Mach	HGDA-47	205		J039137		
FITTING 1/8" PTF LUB PRESSURE RELIEF f/DA-10 Air SW Mach	HGDA-49	205		J039128		
FITTING ELL COMPRESSION f/DA-10 Air SW Mach	HGDA-50	205		J032798		
GASKET CYLINDER HD f/DA-10 Air SW Mach	HGDA-08	204		M371998		
GEAR 1ST RDCTN 189TO1 RATIO F/M23-A&M23-B GEAR BOX	HGG28	198				
GEAR 1ST RDCTN 360TO1 RATIO F/M23-A &M23-B GEAR BOX	HGG27	198				
GEAR 1ST RDCTN 528TO1 RATIO F/M23-A&M23-B GEAR BOX	HGG27A	198				
GEAR 2ND RDCTN 360TO1 RATIO F/M23-A&M23-B GEAR BOX	HGG29	198				
GEAR 2ND RDCTN 528TO1 RATIO F/M23-A&M23-B GEAR BOX	HGG29A	198				
GEAR BEVEL HAND-THROW F/M23-A AND M23-B GEAR BOX	HGG22	198				
GEAR BOX F/M23-A&M23-B GEAR BOX	HGG2	198				
GEAR WORM F/M23-A&M23-B GEAR BOX	HGG20	198				
GROMMET WIRE HARNESS f/ Indication Circuit Controller	HGC-98	203				
GUARD F/THROW ROD F/GRS SW MACH	HL090117-000	212				
GUARD F/THROW ROD F/GRS SW MACH	HL090182-000	212				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION O SWITCH MACHINES & COMPONENTS						
HAND CRANK f/ SW Mach Motor 6" LONG	HG996067-000	213				
HAND CRANK f/SW Mach Motor 12" LONG	HG996067-001	213				
HASP ADJ F/M23-A&M23-B SW MACH	HGSM-95	191				
HASP COMPLETE F/U5 SW CIRCUIT CNTRLR	HGU90	211				
HASP F/M23-A&M23-B SW MACH	HGSM-97	191				
INDICATION CIRCUIT CONTROLLER DRAWING & REFERENCE NUMBERS		202				
INDICATION CIRCUIT CONTROLLER f/M23-A, M23-B & M3 SW Mach	HGC-Aa	203				
LATCH ASBLY f/GRS SW Mach Covers	HG996254-000	214				
LEVER HAND THROW F/M23-A&M23-B SW MACH	HGSM-58	191				
LEVER LINK PHENOLIC F/U5 SW CIRCUIT CNTRLR	HGU52	211				
LEVER SELECTOR F/M23-A&M23-B SW MACH	HGSM-57	191				
LEVER SUPPORT F/M23-A&M23-B GEAR BOX	HGG56	199				
LOCKWASHER F/M23-A&M23-B SW MACH	HGSM-85	191				
LUG HASP F/U5 SW CIRCUIT CNTRLR	HGU87	211				
LUG HINGE F/M23-A&M23-B SW MACH	HGSM-94	191				
M23-A & M23-B COMPONENT DRAWING & REFERENCE NUMBERS		186				
M23-A & M23-B COMPONENT PICTURES		187				
M23A & M23B GEAR BOX DRAWING & REFERENCE NUMBERS		193				
M23A & M23B GEAR BOX PICTURES		194				
MAGNET 130 OHM f/DA-10 Air SW Mach	HGDA-28	205		N371995		
MOTOR CUTOUT TERM PST CAP F/M23-A&M23-B SW MACH	HGSM-138	191				
MOTOR CUTOUT TERM PST CAP F/M23-A&M23-B SW MACH	HGSM-139	191				
MOTOR CUTOUT TERML PST F/M23-A&M23-B SW MACH	HGSM-140	191				
NA-15 COVER HASP ASSEMBLY	HG3801-X	206				
NUT f/DA-10 Air SW Mach	HGDA-26	205		M001509		
NUT 1"-14 HEX SLTD STL f/DA-10 Air SW Mach	HGDA-07	204		J480160		
NUT F/U5 SW CIRCUIT CNTRLR	HGU72	211				
NUT LOCK F/M23-A&M23-B GEAR BOX	HGG73	199				
NUT LOCK F/M23-A&M23-B SW MACH	HGSM-34	190				
NUT LOCK F/M23-A&M23-B SW MACH	HGSM-56	191				
NUT MAGNETIZED LOCK f/DA-10 Air SW Mach	HGDA-30	205		M371999		
OIL BOTTOM FITTING f/GRS SW Mach	HG991110-000	213				
OIL TOP FITTING f/GRS SW Mach	HG991118-000	213				
PACKING f/DA-10 Air SW Mach	HGDA-05	204		J067421		
PACKING U-CUP f/DA-10 Air SW Mach	HGDA-46	205		J067436		
PIN CONNECTION F/M23-A&M23-B SW MACH	HGSM-19A	190				
PIN f/ Indication Circuit Controller	HGC-10	203				
PIN F/U5 SW CIRCUIT CNTRLR	HGU46	211				
PIN F/U5 SW CIRCUIT CNTRLR	HGU53	211				
PIN SQ HEAD f/ Indication Circuit Controller	HGC-62	203				
PINION BEVEL HAND-THROW F/ M23-A&M23-B GEAR BOX	HGG21	198				
PINION BEVEL HAND-THROW F/M22-A GEAR BOX	HGG21A	198				
PIPE NIPPLE F/M23-A&M23-B SW MACH	HGSM-31	190				
PISTON FOLLOWER f/DA-10 Air SW Mach	HGDA-41	205		M371967		
PISTON FOLLOWER f/DA-10 Air SW MachH	HGDA-38	205		M371968		
PISTON FOLLOWER f/DA-10 Air SW Mach	HGDA-40	205		M106286		
PISTON ROD f/DA-10 Air SW Mach	HGDA-42	205		N371987		
PISTON SPACER NUT f/DA-10 Air SW Mach	HGDA-39	205		M371985		
PLATE COVER F/M23-A&M23-B SW MACH	HGSM-67	191				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
SECTION O SWITCH MACHINES & COMPONENTS			SAFETRAN	USS	GRS	WC
PLATE F/M23-A&M23-B GEAR BOX	HGG15	198				
PLATE F/M23-A&M23-B SW MACH	HGSM-52	191				
PLATE HAND F/M23-A AND M23-B SWITCH MACHINE	HGSM-61	191				
PLATE MOTOR F/M23-A&M23-B SW MACH	HGSM-60	191				
PLATE WIRE GUIDE 1-1/2"NPT HOLE F/U5 SW CIRCUIT CNTRLR	HGU19	210				
PLATE WIRE GUIDE 2" NPT HOLE F/U5 SW CIRCUIT CNTRLR	HGU19A	210				
PLATE WIRE GUIDE BLANK F/U5 SW CIRCUIT CNTRLR	HGU17	210				
PLUG EXHAUST f/DA-10 Air SW Mach	HGDA-19	205		M372007		
PROTECTOR 1/2" INT PIPE THREAED f/DA-10 Air SW Mach	HGDA-52	205		J032922		
RING "O" 1 X 1 1/4 f/DA-10 Air SW Mach	HGDA-04	204		J067427		
RING "O" 11/16 X 7/8 f/DA-10 Air SW Mach	HGDA-13	204		J067123		
RING "O" 5/8 X 13/16 f/DA-10 Air SW Mach	HGDA-12	204		J067130		
RING "O" 5/8 X 13/16 F/DA-10 AIR SW MACH	HGDA-14	204				
RING PACKING BACK-UP f/DA-10 Air SW Mach	HGDA-03	204		M371990		
RING RETAINER f/DA-10 Air SW Mach	HGDA-44	205		J791577		
RING RETAINER f/DA-10 Air SW Mach	HGDA-01	204		J792183		
RING SQ RETAINING f/DA-10 Air SW Mach	HGDA-34	205		J791578		
RING-V RETAINER f/DA-10 Air SW Mach	HGDA-45	205		J723192		
ROD CUTOUT ADJ LINK F/M23-A&M23-B GEAR BOX	HGG50	199				
ROD EYE f/ Indication Circuit Controller	HGC-19	203				
ROD LOCK CLIP KIT w/Four 5/16" - 18 X 3/4" Screws	HG031190-000	212				
ROD LOCK INTERNAL f/Right or Left Hand Operation	HG996188-000	192				
ROD LOCK INTERNAL ADJ f/Right or Left Hand Operation	HG996180-000	192				
ROD LOCK INTERNAL f/SW Mach 5A, E, G, & H	HG996842-000	212				
ROD LOCK ROD INTERNAL LEFT HAND f/GRS SW Mach	HG996117-000	212				
ROD LOCK SUPPORT F/M23-A&M23-B SW MACH	HGSM-93	191				
ROD OPERATING F/NA-15 SW MACH 1 1/4"X 8"L 1"OFFSET RIGHT	HL996899-000	206				
ROD OPERATING F/NA-15 SW MACH 1 1/4"X64"L 1"OFFSET RIGHT	HL996899-001	206				
ROD POINT DETECTOR ASBLY INTERNAL 28"L f/M22 SW Mach	HG996119-000	192				
ROD POINT DETECTOR ASBLY INTERNAL 31-1/4"L f/M23 SW Mach	HG996189-000	192				
ROD POINT DETECTOR INTERNAL f/GRS SW Mach	HG996118-000	212				
ROD PUSH MOTOR CUTOUT F/M23-A&M23-B SW MACH	HGSM-27	190				
ROD PUSH SPRIONG MOTOR CUTOUT F/M23-A&M23-B SW MACH	HGSM-48	191				
ROLLER f/ Indication Circuit Controller	HGC-9	203				
ROLLER F/M23-A&M23-B GEAR BOX	HGG42	199				
ROLLER F/M23-A&M23-B GEAR BOX	HGG43	199				
ROLLER GUIDE F/M23-A&M23-B SW MACH	HGSM-13	190				
ROLLER GUIDE F/M23-A&M23-B SW MACH	HGSM-14	190				
ROLLER OPERATION F/M23-A&M23-B SW MACH	HGSM-17	190				
ROLLER STAINLESS F/U5 SW CIRCUIT CNTRLR	HGU45	211				
ROLLER STUD F/M23-A&M23-B GEAR BOX	HGG44	199				
SCREW f/ Indication Circuit Controller	HGC-67	203				
SCREW 1/2 X 3 1/2 HEX STL f/DA-10 Air SW Mach	HGDA-17	205		J050105		
SCREW 1/2 X 4 1/2 HEX STL f/DA-10 Air SW Mach	HGDA-16	205		J050025		
SCREW 1/4 X 2 1/2 f/DA-10 Air SW Mach	HGDA-23	205		M372211		
SCREW 5/16 X 2 1/2 f/DA-10 Air SW Mach	HGDA-21	205		M372212		

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION O SWITCH MACHINES & COMPONENTS						
SHAFT END PLATE F/M23-A&M23-B GEAR BOX	HGG32	198				
SHAFT F/M23-A&M23-B GEAR BOX	HGG26	198				
SHAFT F/M23-A&M23-B GEAR BOX	HGG48	199				
SHAFT F/M23-A&M23-B GEAR BOX	HGG55	199				
SHAFT LEVER HAND-THROW F/M23-A&M23-B GEAR BOX	HGG24	198				
SHAFT LEVER SELECTOR F/M23-A&M23-B GEAR BOX	HGG25	198				
SHAFT ROCKER 4-WAY F/U5 SW CIRCUIT CNTRLR	HGU71	211				
SHAFT ROCKER 6-WAY F/U5 SW CIRCUIT CNTRLR	HGU71A	211				
SHAFT WORM F/M23-A&M23-B GEAR BOX	HGG4	198				
SPACER F/M23-A&M23-B GEAR BOX	HGG19-S	198				
SPACER F/M23-A&M23-B GEAR BOX	HGG30	198				
SPACER F/M23-A&M23-B GEAR BOX	HGG31	198				
SPRING CONTACT f/ Indication Circuit Controller	HGC-33	203				
SPRING CONTACT f/ Indication Circuit Controller	HGC-34	203				
SPRING CONTACT f/ Indication Circuit Controller	HGC-35	203				
SPRING CONTACT f/ Indication Circuit Controller	HGC-69	203				
SPRING F/U5 SW CIRCUIT CNTRLR	HGU73	211				
SPRING REINFORCING f/ Indication Circuit Controller	HGC-36	203				
SPRING REINFORCING f/ Indication Circuit Controller	HGC-37	203				
SPRING REINFORCING f/ Indication Circuit Controller	HGC-38	203				
SPRING STOP f/ Indication Circuit Controller	HGC-70	203				
STEM ARMATURE f/DA-10 Air SW Mach	HGDA-29	205		M372015		
STRAP F/M23-A&M23-B SWITCH MACHINE	HGSM-120	191				
STUD BALL 1" DIA 5/8"-11 THREADED f/7J & 7K Circuit Controller	HG996859-000	214				
STUD ECCENTRIC F/M23-A&M23-B SW MACH	HGSM-96	191				
STUD F/M23-A AND M23-B SW MACH	HGSM-91	191				
STUD F/M23-A&M23-B SW MACH	HGSM-92	191				
TERM BOARD SUPPORT F/M23-A&M23-B SW MACH	HGSM-26	190				
TRUNION f/ Indication Circuit Controller	HGC-44	203				
TRUNION f/ Indication Circuit Controller	HGC-45	203				
TUBING CU 1/2"INT PIPE THEAERD f/DA-10 Air SW Mach	HGDA-51	205		M372069		
U5 SWITCH CIRCUIT CONTROLLER DRAWING & REFERENCE NUMBERS		207				
U5 SWITCH CIRCUIT CONTROLLER PICTURES		208				
VALVE ARMATURE f/DA-10 Air SW Mach	HGDA-31	205		M372014		
VALVE CHAMBER f/DA-10 Air SW Mach	HGDA-09	204		M371971		
VALVE CONNECTOR f/DA-10 Air SW Mach	HGDA-11	204		M372047		
VALVE COUPLING f/DA-10 Air SW Mach	HGDA-10	204		M372046		
VALVE NUT CAP f/DA-10 Air SW Mach	HGDA-36	205		N371989		
VALVE PILOTAIR f/DA-10 Air SW Mach	HGDA-18	205		J33129		
VALVE PIN f/DA-10 Air SW Mach	HGDA-33	205		M003100		
VALVE SEAT f/DA-10 Air SW Mach	HGDA-32	205		M372024		
WASHER 1/2" STL LOCK XHVY f/DA-10 Air SW Mach	HGDA-15	205		J047769		
WASHER 1/4" STL LOCK XHVY f/DA-10 Air SW Mach	HGDA-24	205		J047766		
WASHER 5/16" STL LOCK XHVY f/DA-10 Air SW Mach	HGDA-22	205		J047767		
WASHER BEVELED F/M23-A&M23-B SW MACH	HGSM-88B	191				
WASHER F/M23-A&M23-B GEAR BOX	HGG49A	199				

PRODUCT DESCRIPTION	LW PART NO	PG#		CROSS REFERENCES		
			SAFETRAN	USS	GRS	WC
SECTION O SWITCH MACHINES & COMPONENTS						
WASHER F/M23-A&M23-B GEAR BOX	HGG51	199				
WEAR PLATE f/GRS SW Mach	HG031193-000	212				
WEAR PLATE f/GRS SW Mach	HG031195-000	212				
WEARING BRACKET F/M23-A&M23-B SW MACH	HGSM-20	190				
WIPER f/DA-10 Air SW Mach	HGDA-02	204		J791579		
WIRE .052" STAINLESS STEEL 1' 3" f/DA-10 Air SW Mach	HGDA-20	205		A047767		
YOKE STOP ADJ f/ Indication Circuit Controller	HGC-14A	203				
YOKE SUPPORT F/M23-A&M23-B GEAR BOX	HGG53	199				
SECTION P YARD MATERIALS		**215**				
GENERAL INFORMATION ON RETARDERS		216				
RETARDER EM BRAKESHOE BOLT ONLY T-HEAD COURSE THREAD 3/4" X 1" GRADE 8	GA8800	218				
RETARDER EM BRAKESHOE BOLT ONLY T-HEAD FINE THREAD 3/4" X 1" GRADE 8	GA8800-1	218				
RETARDER EM BRAKESHOE BOLT T-HEAD COURSE THREAD 3/4" X 1" GRADE 8 w/Nut & Lockwasher	GA8800-X	218				
RETARDER EM BRAKESHOE BOLT T-HEAD FINE THREAD 3/4" X 1" GRADE 8 w/Nut & Lockwasher	GA8800-1X	218				
RETARDER EM LOCKWASHER f/GA8800 & GA8800-1 Brakeshoe Bolt	GA8803	218				
RETARDER EM NUT COURSE THREAD f/GA8800 Brakeshoe Bolt	GA8802	218				
RETARDER EM NUT FINE THREAD f/GA8800-1 Brakeshoe Bolt	GA8804	218				
RETARDER EP BRAKESHOE BOLT 3-1/4" LONG X 7/8" GRADE 8 w/Nut & Lockwasher	GB8850-X	219				
RETARDER EP BRAKESHOE BOLT 3-3/4" LONG X 7/8" GRADE 8 w/Nut & Lockwasher	GB8852-X	219				
RETARDER EP BRAKESHOE BOLT 4" LONG X 7/8" GRADE 8 w/Nut & Lockwasher	GB8854-X	219				
RETARDER EP BRAKESHOE BOLT ONLY 3-1/4" LONG X 7/8" GRADE 8	GB8850	219				
RETARDER EP BRAKESHOE BOLT ONLY 3-3/4" LONG X 7/8" GRADE 8	GB8852	219				
RETARDER EP BRAKESHOE BOLT ONLY 4" LONG X 7/8" GRADE 8	B8854	219				
RETARDER EP CONTROL VALUE RCV-1 8-150 PSIG OPERATING PRESSURE 12 VDC HIGH SPEED	GB1900-X12	217				
RETARDER EP CONTROL VALUE RCV-1 8-150 PSIG OPERATING PRESSURE 24 VDC HIGH SPEED	GB1900-X24	217				
RETARDER EP LOCKWASHR f/GB8850 GB8852 & GB8854 Brakeshoe Bolt	GB9520	219				
RETARDER EP NUT f/GB8850 GB8852 & GB8854 Brakeshoe Bolt	GB9445	219				
RETARDER EP NUT SECURITY LOCK f/GB8850 GB8852 & GB8854 Brakeshoe Bolt	GB9445S	219				
SWITCH LAMP 2 POSITION 4" DIA LENS PEDESTAL MOUNT w/Green & Yellow	ZB7200-1X	220				
SWITCH LAMP BLUE FLAG 4" DIA LENS PEDESTAL MOUNT w/Blue & Yellow	ZB7210-X	220				
SWITCH LAMP ONLY BLUE ASPECT w/Shield f/ZB7210-X & ZB7200-1X	ZD1019-1XB	220				
SWITCH LAMP ONLY GREEN ASPECT w/Shield f/ZB7210-X & ZB7200-1X	ZD1019-1XG	220				
SWITCH LAMP ONLY YELLOW ASPECT w/Shield f/ZB7210-X & ZB7200-1X	ZD1019-1XY	220				
SWITCH LAMP SHIELD ONLY f/ZB210-X ZB7200-1X	5S7402	220				
SECTION Q TOOLS & EQUIPMENT		**221**				
BONDING BIT 3/8" DIA FLAT SHANK COBALT	CA2843C	226				1460
BONDING BIT 3/8" DIA ROUND SHANK COBALT	CA2853C	226				1460R
CABLE STRIPER f/Removing UG Cable Jacket	DA032100-1X	224				
CHART PAPER	AA1720B	223				
CHART PAPER	AA1720C	223				
CHART PAPER	AA1740B	223				
CIRCUIT PLAN HOLDER 2"DIA x 24" LONG	ZB1746-X	223				
DUXSEAL 1 LB BAG	ZB1772-1	225				
DUXSEAL 5 LB BAG	ZB1772	225				
LOCK TERMINAL WRENCH ZAMACK w/o Chain	ZB46023	223				
PIPE CONDUIT GALV STEEL 4" DIA X 10.5 FT LONG 1 COUPLER 1 POLY CAP f/Underground Cable	ZB31023-X	224				
PIPE CONDUIT GALV STEEL 4" DIA X 21 FT LONG 1 COUPLER 1 POLY CAP f/Underground Cable	ZB31024-X21	224				

PRODUCT DESCRIPTION	LW PART NO	PG#	CROSS REFERENCES			
			SAFETRAN	USS	GRS	WC
SECTION Q TOOLS & EQUIPMENT						
RELAY CONTACT SPRAY GLOBO QUAD OIL WATER REPELLANT 12 OZ CAN	ZB3002	225				
RELAY EXTRACTOR TOOL	EC032619-25X	222				
RELAY SHIPPING CARTON f/1ea 4PT or 6PT w/Styrfoam Protective Holder	EC2505-X	223				
RELAY SHIPPING CARTON f/1ea Plug In Style B1 Or P150 w/Styrfoam Protective Holder	EC2505-1X	223				
RELAY TEST NUT WRENCH	EC032619-22X	222				
SLEEVE CRIMPING TOOL COMPRESSION TYPE GROOVE B & A f/Nicopress Sleeves	BA17-BA	224				
SLEEVE CRIMPING TOOL COMPRESSION TYPE GROOVE D & C f/Nicopress Sleeves	BA31-DC	224				
SLEEVE CRIMPING TOOL COMPRESSION TYPE GROOVE D & J f/Nicopress Sleeves	BA31-DJ	224				337-10
SLEEVE CRIMPING TOOL COMPRESSION TYPE GROOVE P & J f/Nicopress Sleeves	BA53-XPJ	224				
SWITCH ADUSTMENT WRENCH 10-1/4" LONG f/Throw Rods 3/4"	HL061131-0034	226				
SWITCH ADUSTMENT WRENCH 10-1/4" LONG f/Throw Rods 5/8"	HL061131-0058	226				
SWITCH ADUSTMENT WRENCH 15-15/16" LONG f/Throw Rods 1"	HL061131-001	226				
SWITCH ADUSTMENT WRENCH 15-15/16" LONG f/Throw Rods 1-1/4"	HL061131-0025	226				
TERMINAL WRENCH 1/2" DRIVE 4-1/2" LONG	EC032619-1X	222				
TERMINAL WRENCH 1/2" DRIVE 6-1/2" LONG	EC032619-3X	222				
TEST SHUNT .06 OHM BOTTOM OF RAIL	CA2903-X	222				
TEST SHUNT .06 OHM TOP OF RAIL	CA2900-X	222				
TEST SHUNT HARDWARE OHM BOTTOM OF RAIL	CA2903-1X	222				
TEST SHUNT HARDWARE OHM TOP OF RAIL	CA2900-1X	222				
WIRE EYELET CRIMPING TOOL RATCHET TYPE f/#10-#16 Wire Heavy Duty	9A59239-4	224				
WIRE STRIPER f/#10 #22 Wire w/Replacable Cutting Blade	9A45-092	224				
SECTION R ALSTOM (GRS) REPLACEMENT PARTS		**227**				
CLS ADAPTOR RING TO CONVERTGRS TYPE D TO REAR REMOVABLE DOUBLET	5Z4497	229				
CLS BACKGROUND & SNOWSHIELD 1 POSITION f/GRS Type D	5S4706S-1X	228				
CLS BACKGROUND & SNOWSHIELD 2 POSITION f/GRS Type D	5S4707S-1X	228				
CLS BACKGROUND & SNOWSHIELD 3 POSITION f/GRS Type D	5S4708S-1X	228				
CLS BACKGROUND 1 POSITION f/GRS Type D	5S4706S-X	228			P73-292	
CLS BACKGROUND 2 POSITION f/GRS Type D	5S4707S-X	228			P73-291	
CLS BACKGROUND 3 POSITION f/GRS Type D	5S4708S-X	228			P73-290	
CLS GRS TYPE MF COMPLETE GYR 6-3/8" DIA LENS PREWIRED & PREFOCUSED	5B4900-X	230				
CLS HOOD 10" f/GRS Type D	5S4715S	228			P73-286	
CLS HOOD f/GRS Type MF & FA Dwarf	5Z4703-1	230			P73-289	
CLS LAMP BRACKET FOCUSED f/GRS Type D	5Z4655-XF	229				
CLS LAMP BRACKET UNFOCUSED f/GRS Type D	5Z4655-X	229				
CLS MOUNTING BRACKET FRONT OR SIDE MOUNT f/5" Dia Mast w/External Conduit & Coupling	5Z4600-X	230			A73-161	
CLS TYPE D REPLACEMENT PARTS		228				
SEARCHLIGHT BACKGROUND f/SA-1 20" Dia	5S4702S	231				
SEARCHLIGHT BACKGROUND f/SA-1 36" Dia	5S4792S	231				
SEARCHLIGHT HOOD f/SA-1 15" Long	5S4701S	231				
SEARCHLIGHT PHANKILL ASSEMBLY SLANTED f/SA-1 w/Honeycomb Phankill	5S4803-X	231				

PRODUCT DESCRIPTION	LW PART NO	PG#	SAFETRAN	CROSS REFERENCES USS	GRS	WC
SECTION S UNION SWITCH & SIGNAL REPLACEMENT PARTS		**232**				
CLS BACKGROUND 1 POSITION f/US&S Type R2 P5		234				
CLS BACKGROUND 2 POSITION f/US&S Type R2 P5		234				
CLS BACKGROUND 3 POSITION f/US&S Type R2 P5		234				
CLS BACKGROUND 4 POSITION f/US&S Type R2 P5		234				
CLS BULB BRACKET ADAPTOR f/US&S CLS Ceramic Bulb Bracket Converts Rebase Bulb to S11	5Z4674-1X	233				
CLS BULB BRACKET ASSEMBLY f/US&S R2, P5, TP5 & N2	5Z4669-X	233				
CLS DOUBLET LENS ASSEMBLY f/US&S Type N2 Dwarf 6-3/8" Dia Lense 40 Deg Dflt 3-3/4" Focus	5Z4630-7X#	233				
CLS DOUBLET LENS ASSEMBLY f/US&S Type R2, P5, TP5 8-3/8" Dia Lense 40 Deg Dflt 4" Focus	5Z4535-7X#	233				
CLS HOOD f/US&S Type N2	5S4635	234				
CLS HOOD f/US&S Type PL4	5S4690	234				
CLS HOOD f/US&S Type R2, P5 TP5	5S4541	234				
GATEARM 16'-32' US&S HEX ALUM/FIBER ADJ ENGINEERING TAPE No Lights	6K1440E32T	236				
GATEARM 16'-32' US&S HEX ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights	6K1440E32T4	236				
GATEARM 16'-32' US&S HEX ALUM/FIBER ADJ HI INTENSITY TAPE No Lights	6K1440H32T	236				
GATEARM 16'-32' US&S HEX ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights	6K1440H32T4	236				
GATEARM 16'-46' US&S HEX ALUM/FIBER ADJ ENGINEERING TAPE No Lights	6K1440E46T	236				
GATEARM 16'-46' US&S HEX ALUM/FIBER ADJ ENGINEERING TAPE w/4" Lights	6K1440E46T4	236				
GATEARM 16'-46' US&S HEX ALUM/FIBER ADJ HI INTENSITY TAPE No Lights	6K1440H46T	236				
GATEARM 16'-46' US&S HEX ALUM/FIBER ADJ HI INTENSITY TAPE w/4" Lights	6K1440H46T4	236				
GATEARM 2ND SECTION 16' HI WIND FIBERGLASS ENGINEERING TAPE No Hdw	6M1634E-8SD					
GATEARM 2ND SECTION 16' HI WIND FIBERGLASS HI INTENSITY TAPE No Hdw	6M1634H-8SD					
GATEARM 3RD SECTION 16' HI WIND FIBERGLASS ENGINEERING TAPE No Hdw	6M1638E-SD					
GATEARM 3RD SECTION 16' HI WIND FIBERGLASS HI INTENSITY TAPE No Hdw	6M1638H-SD					
GATEARM BASE SECTION 16' HI WIND ALUM ENGINEERING TAPE f/Shear Pin No Hdw	6M1633E-SD					
GATEARM BASE SECTION 16' HI WIND ALUM HI INTENSITY TAPE f/Shear Pin No Hdw	6M1633H-SD					
SEARCHLIGHT BACKGROUND 36" DIA f/US&S H2 & H5 w/Supports	5S4717-X	235				
SEARCHLIGHT HOOD f/US&S H2 & H5	5S4739	235				
SEARCHLIGHT MOUNTING BRACKET 10" LONG w/5" U-Bolts	5Z4810-X	235				
SEARCHLIGHT MOUNTING BRACKET 23-1/4" LONG w/5" U-Bolts	5Z4811-X	235				
SEARCHLIGHT PHANKILL ASSEMBLY SLANTED f/H2 & H5 w/Honeycomb Phankill	5S4803-X	235274				

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